

BP-20 Rate Proceeding

Final Proposal

Power Revenue Requirement Study  
Documentation

BP-20-FS-BPA-02A

July 2019





POWER REVENUE REQUIREMENT STUDY DOCUMENTATION

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## COMMONLY USED ACRONYMS AND SHORT FORMS

AAC	Anticipated Accumulation of Cash
ACNR	Accumulated Calibrated Net Revenue
ACS	Ancillary and Control Area Services
AF	Advance Funding
AFUDC	Allowance for Funds Used During Construction
aMW	average megawatt(s)
ANR	Accumulated Net Revenues
ASC	Average System Cost
BAA	Balancing Authority Area
BiOp	Biological Opinion
BPA	Bonneville Power Administration
Bps	basis points
Btu	British thermal unit
CIP	Capital Improvement Plan
CIR	Capital Investment Review
CDQ	Contract Demand Quantity
CGS	Columbia Generating Station
CHWM	Contract High Water Mark
CNR	Calibrated Net Revenue
COB	California-Oregon border
COE	U.S. Army Corps of Engineers
COI	California-Oregon Intertie
Commission	Federal Energy Regulatory Commission
Corps	U.S. Army Corps of Engineers
COSA	Cost of Service Analysis
COU	consumer-owned utility
Council	Northwest Power and Conservation Council
CP	Coincidental Peak
CRAC	Cost Recovery Adjustment Clause
CSP	Customer System Peak
CT	combustion turbine
CWIP	Construction Work in Progress
CY	calendar year (January through December)
DD	Dividend Distribution
DDC	Dividend Distribution Clause
<i>dec</i>	decrease, decrement, or decremental
DERBS	Dispatchable Energy Resource Balancing Service
DFS	Diurnal Flattening Service
DNR	Designated Network Resource
DOE	Department of Energy
DOI	Department of Interior
DSI	direct-service industrial customer or direct-service industry
DSO	Dispatcher Standing Order
EE	Energy Efficiency

EIM	Energy imbalance market
EIS	Environmental Impact Statement
EN	Energy Northwest, Inc.
ESA	Endangered Species Act
ESS	Energy Shaping Service
e-Tag	electronic interchange transaction information
FBS	Federal base system
FCRPS	Federal Columbia River Power System
FCRTS	Federal Columbia River Transmission System
FELCC	firm energy load carrying capability
FERC	Federal Energy Regulatory Commission
FOIA	Freedom Of Information Act
FORS	Forced Outage Reserve Service
FPS	Firm Power and Surplus Products and Services
FPT	Formula Power Transmission
FRP	Financial Reserves Policy
F&W	Fish & Wildlife
FY	fiscal year (October through September)
G&A	general and administrative (costs)
GARD	Generation and Reserves Dispatch (computer model)
GMS	Grandfathered Generation Management Service
GSP	Generation System Peak
GSR	Generation Supplied Reactive
GRSPs	General Rate Schedule Provisions
GTA	General Transfer Agreement
GWh	gigawatthour
HLH	Heavy Load Hour(s)
HOSS	Hourly Operating and Scheduling Simulator (computer model)
HYDSIM	Hydrosystem Simulator (computer model)
IE	Eastern Intertie
IM	Montana Intertie
<i>inc</i>	increase, increment, or incremental
IOU	investor-owned utility
IP	Industrial Firm Power
IPR	Integrated Program Review
IR	Integration of Resources
IRD	Irrigation Rate Discount
IRM	Irrigation Rate Mitigation
IRPL	Incremental Rate Pressure Limiter
IS	Southern Intertie
kcfs	thousand cubic feet per second
kW	kilowatt
kWh	kilowatthour
LDD	Low Density Discount
LGIA	Large Generator Interconnection Agreement
LLH	Light Load Hour(s)

LPP	Large Project Program
LTF	Long-term Firm
Maf	million acre-feet
Mid-C	Mid-Columbia
MMBtu	million British thermal units
MNR	Modified Net Revenue
MRNR	Minimum Required Net Revenue
MW	megawatt
MWh	megawatthour
NCP	Non-Coincidental Peak
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NFB	National Marine Fisheries Service (NMFS) Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp)
NLSL	New Large Single Load
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanographic and Atmospheric Administration Fisheries
NOB	Nevada-Oregon border
NORM	Non-Operating Risk Model (computer model)
Northwest Power Act	Pacific Northwest Electric Power Planning and Conservation Act
NP-15	North of Path 15
NPCC	Pacific Northwest Electric Power and Conservation Planning Council
NPV	net present value
NR	New Resource Firm Power
NRFS	NR Resource Flattening Service
NRU	Northwest Requirements Utilities
NT	Network Integration
NTSA	Non-Treaty Storage Agreement
NUG	non-utility generation
NWPP	Northwest Power Pool
OATT	Open Access Transmission Tariff
O&M	operation and maintenance
OATI	Open Access Technology International, Inc.
OS	Oversupply
OY	operating year (August through July)
PDCI	Pacific DC Intertie
PF	Priority Firm Power
PFp	Priority Firm Public
PFx	Priority Firm Exchange
PNCA	Pacific Northwest Coordination Agreement
PNRR	Planned Net Revenues for Risk
PNW	Pacific Northwest
POD	Point of Delivery
POI	Point of Integration or Point of Interconnection
POR	Point of Receipt

PS	Power Services
PSC	power sales contract
PSW	Pacific Southwest
PTP	Point to Point
PUD	public or people's utility district
PW	WECC and Peak Service
RAM	Rate Analysis Model (computer model)
RCD	Regional Cooperation Debt
RD	Regional Dialogue
RDC	Reserves Distribution Clause
REC	Renewable Energy Certificate
Reclamation	U.S. Bureau of Reclamation
REP	Residential Exchange Program
REPSIA	REP Settlement Implementation Agreement
RevSim	Revenue Simulation Model
RFA	Revenue Forecast Application (database)
RHWM	Rate Period High Water Mark
ROD	Record of Decision
RPSA	Residential Purchase and Sale Agreement
RR	Resource Replacement
RRS	Resource Remarketing Service
RSC	Resource Shaping Charge
RSS	Resource Support Services
RT1SC	RHWM Tier 1 System Capability
SCD	Scheduling, System Control, and Dispatch Service
SCS	Secondary Crediting Service
SDD	Short Distance Discount
SILS	Southeast Idaho Load Service
Slice	Slice of the System (product)
T1SFCO	Tier 1 System Firm Critical Output
TCMS	Transmission Curtailment Management Service
TGT	Townsend-Garrison Transmission
TOCA	Tier 1 Cost Allocator
TPP	Treasury Payment Probability
TRAM	Transmission Risk Analysis Model
Transmission System Act	Federal Columbia River Transmission System Act
Treaty	Columbia River Treaty
TRL	Total Retail Load
TRM	Tiered Rate Methodology
TS	Transmission Services
TSS	Transmission Scheduling Service
UAI	Unauthorized Increase
UFT	Use of Facilities Transmission
UIC	Unauthorized Increase Charge
ULS	Unanticipated Load Service
USACE	U.S. Army Corps of Engineers



USBR	U.S. Bureau of Reclamation
USFWS	U.S. Fish & Wildlife Service
VER	Variable Energy Resource
VERBS	Variable Energy Resource Balancing Service
VOR	Value of Reserves
VR1-2014	First Vintage Rate of the BP-14 rate period (PF Tier 2 rate)
VR1-2016	First Vintage Rate of the BP-16 rate period (PF Tier 2 rate)
WECC	Western Electricity Coordinating Council
WSPP	Western Systems Power Pool

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# 1. GENERATION REVENUE REQUIREMENTS

## 1.1 Introduction

This chapter documents how Bonneville Power Administration's (BPA) annual generation revenue requirements are determined. Two tables are presented for each year of the rate period. On the first table, revenue requirements are projected in an income statement format. The second table, a statement of annual cash flows, determines the minimum required net revenues and presents the annual cash flows available for risk mitigation. These revenue requirements form the basis of the program.

## 1.2 Income Statement

Below is a line-by-line description of the components in the Table 1A, Income Statement

Power System Generation Resources (Line 2). This category encompasses the costs associated with power generated by Federal hydroelectric facilities operated by the Corps and Reclamation and power obtained through contracts for non-Federal resources and through energy conservation. This category includes lines 3 through 10, described below. *See* Documentation, BP-20-FS-BPA-02A, Chapter 3.

Operating Generation Resources (Line 3). This category includes the operations and maintenance expenses associated with power-producing resources including the Columbia Generating Station (CGS), Reclamation, and Corps, and the annual expenses associated with long-term contract generating projects. *Id.*

Operating Generation Settlement Payments (Line 4). A settlement agreement between the Confederated Tribes of the Colville Reservation and the United States was signed in 2004 concerning the construction of Grand Coulee Dam. The Settlement Act (Public Law 103-436) ratifying the settlement agreement authorizes BPA to make annual payments to the Tribes for the use of tribal lands for power production at the Columbia Basin project. *Id.*

Non-Operating Generation (Line 5). This category includes the decommissioning costs of the Trojan nuclear plant and the unfinished WNP-1 and WNP-3 nuclear plants. *Id.*

Contracted Power Purchases (Line 6). This category includes short-term (balancing) power purchases and hedging/mitigation. *Id.*

Augmentation Power Purchases (Line 7). This category includes augmentation power purchases and the PNCA headwater benefit. Augmentation power purchase costs reflect the energy that BPA purchases in order to satisfy its obligation to meet the load requirements for public utilities. The PNCA headwater benefit refers to the costs associated with benefits BPA receives from storage projects in Canada. *Id.*

Exchanges and Settlements (Line 8). This category represents the benefits for qualifying public utilities and IOUs that are calculated as part of the Residential Exchange Program. *Id.*

Renewable Generation (Line 9). This category reflects the operating expenses of several generating projects fueled by renewable energy resources, such as wind, geothermal, methane gas, solar, and “fish-friendly small hydro projects.” *Id.*

Generation Conservation (Line 10). This category includes the cost of conservation programs including Marketing Development, which are reimbursable contracts with equal and offsetting revenues; Market Transformation; Legacy Conservation programs; Technology Leadership; and Low-Income Weatherization. *Id.*

Power Non-Generation Operations (Line 11). This category reflects Power Services’ internal costs associated with supporting the power function. It includes the costs of activities such as generation oversight, weather and stream flow forecasting, system operations planning, schedule planning, pre-scheduling, after-the-fact accounting of power transactions, power billing, customer account executives and customer service support staff, development and administration of power sales contracts, PS strategy development, PS financial reporting, analysis and budgeting, risk management, and PS human resources management. *Id.*

PS Transmission Acquisition and Ancillary Services (Line 12). This category includes the annual expenses associated with Power Services’ Transmission Acquisition program. It represents costs associated with services necessary to deliver energy from resources to markets or loads. This includes transmission, ancillary services, and real power losses, as purchased from BPA's Transmission Services business unit (TS) or non-Federal entities; TS embedded costs for the facilities that integrate power from Corps and Reclamation projects onto the transmission system; and metering and communication requirements. *Id.*

F&W/USF&W/Planning Council/Environmental Requirements (Line 13). BPA funds projects designed to protect, mitigate and enhance fish and wildlife affected by the FCRPS in a manner consistent with the NPCC Columbia River Basin Fish and Wildlife Program, and to implement commitments made pursuant to Biological Opinions (BiOps) issued by NOAA Fisheries and the U.S. Fish and Wildlife Service regarding species listed under the Endangered Species Act. This line item includes the expense portion of BPA’s Fish and Wildlife direct program, including staff costs and operating expenses of fish and wildlife activities. These activities include measures to implement the fish and wildlife mitigation consistent with the NPCC Fish and Wildlife Program as well BiOps issued by the NOAA Fisheries for listed salmon and steelhead and the U.S. Fish and Wildlife Service for listed bull trout and sturgeon. *Id.*

General and Administrative/Shared Services (Line 14). This category represents the allocated portion of BPA’s Corporate General and Administrative costs, which are allocated to the business lines. Major functions besides the Executive Office are Corporate Communication, Finance, Diversity, and Safety. This category includes costs for the Civil Service Retirement System (CSRS) expense; information technology services; infrastructure and maintenance; building rent, maintenance and security; mail services; personnel services; library and printing services; internal training; purchasing; and furniture. CSRS reflects the costs for the unfunded liability of the Civil Service Retirement and Disability Fund, the Employees Health Benefit Fund, and the Employees Life Insurance Fund. *Id.*

Other Income, Expenses, and Adjustments (Line 15). This category would include costs for items that do not fit in any other category. For this proposal, it includes anticipated miscellaneous income related to the return of funds to BPA upon the dissolution of the WNP 1 & 4 decommissioning fund expected to be dissolved in 2021. *Id.*

Depreciation (Line 16). Depreciation is the annual capital recovery expense associated with FCRPS plant-in-service. Reclamation and Corps (including Lower Snake River Fish and Wildlife Compensation Plan (LSRCP)) plant, including assets for fish and wildlife recovery, is depreciated by the straight-line method of calculation, using the composite service life of all projects, 75 years. Capital equipment (office furniture and fixtures, data processing hardware and software, and communications equipment) is also depreciated by the straight-line method using the average service lives for the particular categories of capital investment. *Id.*, Chapter 4.

Amortization (Line 17). Amortization is the annual capital recovery expense associated with two classes of assets. One is non-revenue-producing Federal assets, e.g. legacy energy efficiency investments and fish & wildlife investments. The other encompasses the amortization of non-Federal assets. This includes Energy Northwest's Columbia Generating Station (CGS) and terminated projects 1 and 3, the terminated Northern Wasco contract, and Lewis County's Cowlitz Falls facility. It also includes amortization and accretion expenses associated with the CGS decommissioning trust fund. *Id.*

Total Operating Expenses (Line 18). Total Operating Expenses is the sum of the above expenses (Lines 2 through 18).

Interest on Appropriated Funds (Line 22). Interest on Appropriated Funds includes interest on Corps and Reclamation appropriations, as calculated in the generation repayment studies. *Id.*, Chapters 4 and 6. *Id.*, Chapter 3.

Capitalization Adjustment (Line 23). Implementation of the Refinancing Act entailed a change in capitalization on BPA's financial statements. Outstanding appropriations were reduced as a result of the refinancing by \$2,142 million in the generation function. The reduction is recognized annually over the remaining repayment period of the refinanced appropriations. The annual recognition of this adjustment is based on the increase in annual interest expense resulting from implementation of the Refinancing Act, as shown in repayment studies for the year of the refinancing transaction (1997). The capitalization adjustment is included on the income statement as a non-cash contra-expense. *Id.*

Interest on Bonds Issued to U.S. Treasury (Line 24). Interest on long-term debt includes interest on bonds that BPA issues to the U.S. Treasury to fund investments in capital equipment, conservation, and fish and wildlife, and to fund Reclamation and Corps investments under the Energy Policy Act of 1992 (EPA-92) (P.L. No. 102-486, 1992 U.S. Code Cong. & Admin. News, 106 Stat. 2776). The interest expense is calculated in the generation repayment studies. Any payments of call premiums for bonds projected to be amortized are included in this line. *Id.*

Premiums/Discounts (Line 25). When a bond repaid earlier than its maturity date, the transaction may incur a premium or discount which maybe recognized in the year of the repayment.

Non-Federal Interest (Line 26). This line recognizes the interest component of the annual credits associated with the prepay program. *Id.* It also includes the interest on non-Federal debt. *Id.* at Chapter 8.

Allowance for Funds Used During Construction (AFUDC) (Line 27). AFUDC is a credit against interest costs on long-term debt (Line 24). This reduction to gross interest reflects an estimate of interest on the funds used during the construction period of facilities that have yet to be placed in service. AFUDC is capitalized along with other construction costs and is recovered through rates over the expected service life of the related plant as part of the depreciation expense after the facilities are placed in service. AFUDC, which is calculated outside the generation repayment studies, is associated with the Corps and Reclamation capital investments direct-funded by BPA, and BPA capital equipment. *Id.* at Chapter 3.

Interest Credit on Cash Reserves (Line 28). An interest income credit is also computed on the projected year-end cash balance in the BPA fund attributable to Power Services that carries over into the next year. Also included is an interest income credit calculated in the generation repayment studies on funds to be collected during each year for payments of Federal interest and amortization at the end of the fiscal year. Interest income is credited against bond interest. *Id.*, Chapter 5.

Interest Income on Decommissioning Trust (Line 29). Interest is earned on the CGS decommissioning trust. Beginning in FY 2020, BPA will begin recording this interest income on the income statement *Id.*, Chapter 5.

Other Expense and (Income)(Gains/Losses) (Line 30). Beginning in FY 2020, BPA will begin recording the realized gains and losses on the CGS decommissioning trust. *Id.*, Chapter 5.

Total Other Expense and (Income) (Line 31). This is the sum of Interest on Appropriated Funds (Line 22), Capitalization Adjustment (Line 23), Interest on Bonds Issued to U.S. Treasury (Line 24), Bond Premiums/Discounts (Line 25), Non-Federal Interest (Line 26), AFUDC (Line 27), Interest Credit (Line 28), Interest Income on Decommissioning Trust (line 29), and Other Expense and (Income)(Gains/Losses) (line 30).

Total Expenses (Line 33). Total Expenses are the sum of Total Operating Expenses (Line 18) and Total Other Expense and (Income) (Line 31).

Minimum Required Net Revenues (Line 35). MRNR, an input from Line 2 of the Statement of Cash Flows (Table 1B), may be necessary to cover cash requirements in excess of accrued expenses.

Planned Net Revenues for Risk (PNRR) (Line 36). PNRR are the amount of net revenues to be included in rates for financial risk mitigation. PNRR, starting reserves, the cash-flow when

non-cash expenses exceed cash payments, the CRAC, and other risk mitigation tools are available to mitigate risk, as discussed in the Power Risk and Market Price Study, BP-20-FS-BPA-03.

Planned Net Revenues, Total (Line 37). Planned Net Revenues is the sum of Minimum Required Net Revenues (Line 36) and PNRR (Line 36).

Total Revenue Requirement (Line 39). Total Revenue Requirement is the sum of Total Expenses (Line 33) and Total Planned Net Revenues (Line 37).

### **1.3 Statement of Cash Flows**

Below is a line-by-line description of each of the components in the Table 1B, Statement of Cash Flows.

Minimum Required Net Revenues (Line 2). Determination of this line is a result of annual cash inflows and outflows shown on the Statement of Cash Flows. MRNR may be necessary so that the cash provided from operating activities will be sufficient to cover the planned amortization and irrigation assistance payments without causing the Annual Increase (Decrease) in Cash (Line 28) to be negative. The MRNR amount determined in the Statement of Cash Flows is incorporated in the Income Statement (Line 33).

Non-Federal Interest (Line 4). The interest component of the prepay credits is a non-cash item.

Depreciation and Amortization (Line 5). Depreciation and Amortization are from the Income Statement (Table 1A), lines 17 and 18 respectively. They are included in computing Cash Provided By Operating Activities (Line 10) because they are non-cash expenses of the FCRPS.

Non-Cash Expenses (Line 6). This is the sum of two lines on Table 1A, Interest Income on the Decommissioning Trust (line 29) and Other Expense and (Income)(Gains/Losses) (line 30). Both are credited to the trust fund and never affect the Bonneville Fund.

Capitalization Adjustment (Line 7). Capitalization Adjustment is from the Income Statement (Table 1A, Line 27). It is a non-cash contra-expense.

Non-Cash Revenues (Line 8). These revenues are associated with the credits of the prepay program. The annual non-cash revenues, which are part of the total revenues recovering the FCRPS revenue requirement, are included here as an adjustment to cash from current operations.

Cash Contribution to Decommissioning Trust (Line 9). Prior to FY 2020, contributions to the CGS decommissioning trust was included on the income statement as part of the CGS O&M component of Operating Generation Resources. Beginning with FY 2020, the contributions will no longer appear on the income statement. These will be treated as a balance sheet transaction as a cash contribution to the trust.

Cash Free Up (Line 10). This represents cash coming to Power for the repayment of debt service reassignment related bonds. These bonds will be refinanced which will free up the cash for use to repay Federal bonds.

Cash Provided By Operating Activities (Line 11). Cash Provided By Current Operations, the sum of Lines 2, 4, 5, 6, 7, 8, 9, and 10 is available for the year to satisfy cash requirements.

Investment in Federal Utility Plant (Including AFUDC) (Line 15). Investment in Utility Plant represents the annual increase in additions to appropriated plant-in-service and to capital expenditures for COE, Reclamation, and BPA construction work-in-progress funded by bonds.

Investment in Fish and Wildlife (Line 16). Investment in Fish and Wildlife represents the annual increase in BPA's capital expenditures to fund projects for the protection, mitigation, and enhancement of fish and wildlife affected by the FCRPS in a manner consistent with the NPCC's Columbia River Basin Fish and Wildlife Program and the BiOp issued by NMFS and USFWS.

Cash Used for Investment Activities (Line 17). Cash Used for Investment Activities is the sum of Lines 15 and 16.

Increase in Treasury Borrowings (Line 20). This category reflects the new bonds issued by BPA to the U.S. Treasury to fund capital equipment, conservation, and fish and wildlife capital programs and to direct-fund Reclamation and COE investments under the EPA-92 in the fiscal year, excluding deferred borrowing. *Id.*, Chapter 7.

Repayment of Treasury Borrowings (Line 21). This is BPA's planned repayment of outstanding bonds issued by BPA to the U.S. Treasury as determined in the generation repayment studies. *Id.*, Chapter 6.

Increase in Federal Construction Appropriations (Line 22). Increase in Congressional appropriations transferred to BPA used for the Columbia River Fish Mitigation Project (CRFM). *Id.*, Chapter 4.

Repayment of Federal Construction Appropriations (Line 23). Repayment of Capital Appropriations represents projected amortization of outstanding COE and Reclamation appropriations as determined in the generation repayment studies. *Id.*, Chapter 6.

Repayment of Non-Federal Obligations (Line 24). This represents the principal repayment of the non-Federal debt including short-term lines of credit issued in the prior year.

Customer Proceeds (Line 25). The prepay funds are a source of cash for capital investment. This line recognizes the drawdown of prepay funds as they are used to finance capital investments. *See* Chapter 3.

Payment of Irrigation Assistance (Line 26). Payment of Irrigation Assistance represents the payment of appropriated capital construction costs of Reclamation irrigation facilities that have



been determined to be beyond the ability of the irrigators to pay and allocated to generation revenues for repayment. *Id.*, Chapter 9.

Cash Provided by Borrowing and Appropriations (Line 27). Cash Provided by Borrowing and Appropriations is the sum of Lines 20 through 26. This is the net cash-flow resulting from increases in cash from new long-term debt and capital appropriations and decreases in cash from repayment of long-term debt and capital appropriations.

Annual Increase (Decrease) in Cash (Line 29). Annual Increase (Decrease) in Cash is the sum of Lines 11, 17, and 27 and reflects the annual net cash-flow from current operations and investing and financing activities. Revenue requirements are set to meet all projected annual cash-flow requirements, as included on the Statement of Cash Flows. A decrease shown in this line would indicate that annual revenues would be insufficient to cover the year's cash requirements. In such cases, Minimum Required Net Revenues are included to offset such decrease.

Planned Net Revenues for Risk (PNRR) (Line 31). PNRR reflects the amounts included in revenue requirements to meet BPA's risk mitigation objectives from Table 1A, Line 36.

Total Annual Increase (Decrease) in Cash (Line 33). Total Annual Increase (Decrease) in Cash is the sum of Lines 29 and 31. It is the total annual cash that is projected to be available to add to BPA's cash reserves.

Table 1A

**GENERATION REVENUE REQUIREMENT  
INCOME STATEMENT  
(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 OPERATING EXPENSES		
2     POWER SYSTEM GENERATION RESOURCES		
3         OPERATING GENERATION RESOURCES	681,345	736,892
4         OPERATING GENERATION SETTLEMENT PAYMENTS	22,997	22,997
5     NON-OPERATING GENERATION	1,631	1,531
6         CONTRACTED POWER PURCHASES	86,010	73,977
7         AUGMENTATION POWER PURCHASES	0	0
8         EXCHANGES & SETTLEMENTS	249,767	249,747
9         RENEWABLE GENERATION	36,523	34,869
10        GENERATION CONSERVATION	121,530	121,644
11     POWER NON-GENERATION OPERATIONS	82,816	84,922
12     PS TRANSMISSION ACQUISITION AND ANCILLARY SERVICES	221,643	217,308
13     F&W/USF&W/PLANNING COUNCIL	291,811	292,470
14     GENERAL AND ADMINISTRATIVE/SHARED SERVICES	77,436	78,475
15     OTHER INCOME, EXPENSES AND ADJUSTMENTS	0	(20,000)
16     DEPRECIATION	138,968	141,050
17     AMORTIZATION	<u>379,327</u>	<u>384,364</u>
18 TOTAL OPERATING EXPENSES	2,391,803	2,420,246
19		
20 OTHER EXPENSE AND (INCOME)		
21     INTEREST		
22         APPROPRIATED FUNDS	44,685	45,908
23         CAPITALIZATION ADJUSTMENT	(45,937)	(45,937)
24         BONDS ISSUED TO U.S. TREASURY	61,145	68,928
25         BOND PREMIUMS/DISCOUNTS	13	10
26         NON-FEDERAL INTEREST	245,801	169,807
27         ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION	(15,904)	(16,493)
28         INTEREST CREDIT ON CASH RESERVES	(4,959)	(6,753)
29         INTEREST INCOME ON DECOMMISSIONING TRUST	(8,818)	(9,112)
30         OTHER EXPENSE AND (INCOME) (GAINS/LOSSES)	<u>(5,052)</u>	<u>(5,220)</u>
31 TOTAL OTHER EXPENSE AND (INCOME)	270,974	201,138
32		
33 TOTAL EXPENSES	2,662,777	2,621,385
34		
35 MINIMUM REQUIRED NET REVENUE 1/	15,780	100,690
36 PLANNED NET REVENUE FOR RISK	-	-
37 PLANNED NET REVENUE, TOTAL (34+35)	15,780	100,690
38		
39 TOTAL REVENUE REQUIREMENT	2,678,557	2,722,074

1/ See note on Statement of Cash Flows

Table 1B

**GENERATION REVENUE REQUIREMENT  
STATEMENT OF CASH FLOWS  
(\$000s)**

	<u>A</u>	<u>B</u>
	<u>2020</u>	<u>2021</u>
1 CASH FROM OPERATING ACTIVITIES		
2     MINIMUM REQUIRED NET REVENUE 1/	15,780	100,690
3     NON-CASH ITEMS:		
4         NON-FEDERAL INTEREST	9,826	8,863
5         DEPRECIATION AND AMORTIZATION	518,295	525,414
6         NON-CASH EXPENSES (INTEREST INCOME & GAINS/LOSSES)	(13,870)	(14,332)
7         CAPITALIZATION ADJUSTMENT	(45,937)	(45,937)
8         NON-CASH REVENUES	(30,600)	(30,600)
9         CASH CONTRIBUTION TO DECOMMISSIONING TRUST	(4,100)	(4,300)
10        CASH FREE UP	<u>16,590</u>	<u>15,885</u>
11 CASH PROVIDED BY OPERATING ACTIVITIES	465,984	555,683
12		
13 CASH FROM INVESTMENT ACTIVITIES		
14     INVESTMENT IN:		
15         UTILITY PLANT (INCLUDING AFUDC)	(280,737)	(323,018)
16         FISH & WILDLIFE	<u>(47,266)</u>	<u>(47,266)</u>
17 CASH USED FOR INVESTMENT ACTIVITIES	(328,003)	(370,284)
18		
19 CASH FROM BORROWING AND APPROPRIATIONS:		
20     INCREASE IN BONDS ISSUED TO U.S. TREASURY	308,885	327,639
21     REPAYMENT OF BONDS ISSUED TO U.S. TREASURY	(173,072)	(518,065)
22     INCREASE IN FEDERAL CONSTRUCTION APPROPRIATIONS	19,119	42,646
23     REPAYMENT OF FEDERAL CONSTRUCTION APPROPRIATIONS	0	0
24     REPAYMENT OF NON-FEDERAL OBLIGATIONS	(268,581)	(22,871)
25     CUSTOMER PROCEEDS	0	0
26     PAYMENT OF IRRIGATION ASSISTANCE	<u>(24,331)</u>	<u>(14,747)</u>
27 CASH PROVIDED BY BORROWING AND APPROPRIATIONS	(137,981)	(185,398)
28		
29 ANNUAL INCREASE (DECREASE) IN CASH	0	0
30		
31 PLANNED NET REVENUE FOR RISK	0	0
32		
33 TOTAL ANNUAL INCREASE (DECREASE) IN CASH	0	0

1/ Line 33 must be greater than or equal to zero to indicate that cash cost recovery requirements are being achieved. If not, net revenues (MRNR) are added so that net cash flows for the year (Line 29) are zero.

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## **2. COST ANALYSES**

### **2.1 Introduction**

This chapter documents the development of the costs necessary for ratemaking from the annual generation revenue requirements. For Cost of Service Analysis (COSA), net interest expense and planned net revenues are assigned to each Federal Columbia River Power System (FCRPS) resource pool according to the necessary level of detail. The interbusiness unit embedded costs, generation inputs to ancillary services, synchronous condensing and Corps and Reclamation transmission, are developed from the COSA data.

Data development for the COSA and interbusiness unit embedded costs are derived from the annual costs identified in Table 1A - Generation Income Statement. For the COSA, net interest expenses and planned net revenues, which are first split between Federal hydro projects and the remainder of generation by the use of equivalent annual costs (defined below). The generation portions are then divided between Fish & Wildlife, Conservation and BPA generation programs based on average net investment. These allocations, in turn, form the basis for the association of net interest expenses and MRNR with the interbusiness unit embedded costs.

### **2.2 Annual Capital-Related Cost Components of COSA Resource Pools**

**Equivalent Annual Costs:** Equivalent annual costs are used to prorate net interest expense and planned net revenues between Federal Hydro and the remainder of generation. They compensate for the differences in Federal Hydro of a 75-year service life, but a 50-year repayment period, whereas the other capital areas have the same service lives and repayment periods.

Consequently, net investment, the typical allocator, is distorted for Hydro. Equivalent annual costs are calculated as levelized principal and interest payments (mortgage basis) using gross plant investment and projected additions. A weighted average interest rate is used for the historical plant and projected interest rates are used for additions. The prorating is based on the sum of all calculated proxy-payments for Corps and Reclamation (Federal Hydro), and BPA plant, BPA fish and wildlife investment and all BPA conservation investments (all other generation). The non-Hydro portion is then allocated based on average net plant investment.

### **2.3 Interbusiness Unit Embedded Costs**

**Generation Inputs to Ancillary Services** All tables related to the development of interbusiness unit costs have been deleted because generation inputs rates were settled and did not depend on these embedded costs as would be typical if the rates were contested.

Table 2A

Generation Revenue Requirements by Resource Pool  
PROGRAM CASE  
(\$000s)

FY 2020	A	B	C		D	E	F
	<u>Investment Base</u>	<u>Net Interest</u>	<u>Net Revenues</u>		<u>COE/USBR</u>	<u>All Other</u>	<u>Total Generation</u>
1. GENERATION COSTS							
2. FEDERAL BASE SYSTEM				Equivalent Annual Costs	414,722	133,399	548,121
3. HYDRO		36,976	11,940	Percent	76%	24%	100%
4. FISH AND WILDLIFE	246,459	6,131	1,979				
5. TROJAN				Net Interest Expense	36,976	11,894	48,870
6. WNP #1							
7. CGS				MRNR	11,940	3,840	15,780
8. WNP #3							
9. SYSTEM AUGMENTATION				PNRR	-	-	-
10. BALANCING POWER PURCHASES							
11. TOTAL FEDERAL BASE SYSTEM	246,459	43,107	13,919				
12. NEW RESOURCES							
13. IDAHO FALLS							
14. COWLITZ FALLS							
15. OTHER LONG-TERM POWER PURCHASES							
16. TOTAL NEW RESOURCES							
17. RESIDENTIAL EXCHANGE							
18. CONSERVATION	195,104	4,854	1,567				
19. OTHER GENERATION COSTS							
20. BPA PROGRAMS	36,552	909	294				
21. WNP #3 PLANT							
22. TOTAL OTHER GENERATION COSTS	36,552	909	294				
23. TOTAL GENERATION COSTS	478,115	48,870	15,780				
24. TRANSMISSION COSTS							
25. TBL TRANSMISSION/ANCILLARY SERVICES							
26. 3RD PARTY TRANS/ANCILLARY SERVICES							
27. GENERAL TRANSFER AGREEMENTS							
28. TOTAL TRANSMISSION COSTS							
29. TOTAL PBL REVENUE REQUIREMENT		48,870	15,780				

Table 2A

Generation Revenue Requirements by Resource Pool  
PROGRAM CASE  
(\$000s)

FY 2021

	A	B	C		D	E	F
	<u>Investment Base</u>	<u>Net Interest</u>	<u>Net Revenues</u>		<u>Hydro</u>	<u>All Other</u>	<u>Total Generation</u>
1. GENERATION COSTS							
2. FEDERAL BASE SYSTEM				Equivalent Annual Costs	457,142	133,446	590,587
3. HYDRO		42,206	77,939	Percent	77%	23%	100%
4. FISH AND WILDLIFE	268,316	7,209	13,313				
5. TROJAN				Net Interest Expense	42,206	12,320	54,526
6. WNP #1							
7. CGS				MRNR	77,939	22,751	100,690
8. WNP #3							
9. SYSTEM AUGMENTATION				PNRR	-	-	-
10. BALANCING POWER PURCHASES							
11. TOTAL FEDERAL BASE SYSTEM	268,316	49,415	91,252				
12. NEW RESOURCES							
13. IDAHO FALLS							
14. COWLITZ FALLS							
15. OTHER LONG-TERM POWER PURCHASES							
16. TOTAL NEW RESOURCES							
17. RESIDENTIAL EXCHANGE							
18. CONSERVATION	154,959	4,164	7,689				
19. OTHER GENERATION COSTS							
20. BPA PROGRAMS	35,241	947	1,749				
21. WNP #3 PLANT							
22. TOTAL OTHER GENERATION COSTS	35,241	947	1,749				
23. TOTAL GENERATION COSTS	458,516	54,526	100,690				
24. TRANSMISSION COSTS							
25. TBL TRANSMISSION/ANCILLARY SERVICES							
26. 3RD PARTY TRANS/ANCILLARY SERVICES							
27. GENERAL TRANSFER AGREEMENTS							
28. TOTAL TRANSMISSION COSTS							
29. TOTAL PBL REVENUE REQUIREMENT		54,526	100,690				

**Table 2B**

**Equivalent Annual Costs  
(\$000s)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
	<b>AVG LIFE</b>	<b>COMP PLANT 9/30/2020</b>	<b>WT AV INT RATE</b>	<b>2020 EQ ANN COSTS</b>	<b>COMP PLANT 9/30/2021</b>	<b>WT AV INT RATE</b>	<b>2021 EQ ANN COSTS</b>
1 Corps of Engineers/Bureau of Reclamatio	50	10,630,289	3.02%	\$414,722	10,920,688	3.40%	\$457,142
2 BPA F&W							
3 PBL General Plant	15	531,103	3.56%	46,300	544,622	3.56%	47,502
4 CONSERVATION	18	190,585	1.67%	12,175	199,105	1.63%	11,035
5 Sub-Total	44	1,859,764	2.88%	<u>74,924</u>	1,859,764	2.88%	<u>74,908</u>
				133,399			133,446
	<b>WTD LIFE</b>	<b>INV. BASE AS OF 9/30/2020</b>	<b>ANNUAL DEPR/AMORT</b>	<b>AVG LIFE</b>	<b>INV. BASE AS OF 9/30/2021</b>	<b>ANNUAL DEPR/AMORT</b>	
6 OFFICE FURNITURE & FIXTURES							
7 DATA PROCESSING EQUIPMENT							
8 DATA PROCESSING SOFTWARE							
9 TOTAL GENERAL PLANT - PBL CONSERVATION	18	190,585	10,418	22	199,105	9,245	
10 LEGACY							
11 CONAUG							
12 CONSERVATION ACQUISITION							
13 TOTAL CONSERVATION	44	1,859,764	42,095	44	1,859,764	42,078	



### **3. GENERATION EXPENSES**

#### **3.1 Introduction**

This chapter compiles the expenses that are the basis for cost recovery in determination of generation revenue requirements for the rate approval period and the outyears.

#### **3.2 Expenses**

Table 3A displays the expenses used in the revenue requirement income statement and statement of cash flows of the Study. Revenue Requirement Study, BP-20-FS-BPA-02, Tables 4 and 5.

O&M program expenses are from the Integrated Program Review with revisions. *Id.* Federal Projects Depreciation calculations are found in Chapter 4 of this document. Interest expense is summarized here from the results of the annual generation repayment studies. The calculation of AFUDC is also shown in this chapter.

Corps and Reclamation O&M must be functionalized between generation and the transmission component that will be included in transmission rates.

Depreciation and amortization expense, calculated using the straight-line method, is functionalized according to the associated investment used in the calculations as identified in Chapter 4 of this document.

Interest expense is calculated in the repayment studies for generation using the generation capital appropriations and BPA revenue bonds issued to Treasury at individual interest rates. Generation AFUDC is associated with BPA's direct funding of Corps and Reclamation power-related capital projects.

#### **3.3 Debt-to-Asset Ratio**

The debt to asset ratio is calculated using data from repayment study inputs in Chapters 8 and 9 and outputs of Chapter 11 as well as the depreciation forecasts in Chapter 4.

Table 3A

**Power Services Program Spending Levels  
(\$000s)**

	A	B
	Rate Period	
	<u>2020</u>	<u>2021</u>
1 <b>Power System Generation Resources</b>		
2 <b>Operating Generation</b>		
3 COLUMBIA GENERATING STATION	266,571	323,762
4 BUREAU OF RECLAMATION	153,609	151,623
5 CORPS OF ENGINEERS	252,557	252,557
6 LONG-TERM CONTRACT GENERATING PROJECTS	<u>12,709</u>	<u>13,250</u>
7 <b>Sub-Total</b>	<b>685,445</b>	<b>741,192</b>
8 <b>Operating Generation Settlements and Other Payments</b>		
9 COLVILLE GENERATION SETTLEMENT	22,997	22,997
10 SPOKANE LEGISLATION PAYMENT	<u>0</u>	<u>0</u>
11 <b>Sub-Total</b>	<b>22,997</b>	<b>22,997</b>
12 <b>Non-Operating Generation</b>		
13 TROJAN DECOMMISSIONING	1,200	1,200
14 WNP-1&3 DECOMMISSIONING	<u>431</u>	<u>331</u>
15 <b>Sub-Total</b>	<b>1,631</b>	<b>1,531</b>
16 <b>Gross Contracted Power Purchases</b> (excluding bookout adjustments) <Note 1		
17 DSI MONETIZED POWER SALES	0	0
18 PNCA HEADWATER BENEFITS	3,100	3,100
19 HEDGING/MITIGATION		
20 OTHER POWER PURCHASES - (e.g. Short-Term)	63,139	46,757
21 TIER 2 PURCHASES	<u>13,099</u>	<u>17,808</u>
22 <b>Sub-Total</b>	<b>79,338</b>	<b>67,665</b>
23 <b>Bookout Adjustments to Contracted Power Purchases</b> <Note 1	0	0
24 <b>Augmentation Power Purchases (includes IOU Load Reduc. and Buy Backs)</b>		
25 AUGMENTATION POWER PURCHASES	-	-
26 CONSERVATION AUGMENTATION	<u>-</u>	<u>-</u>
27 <b>Sub-Total</b>	<b>-</b>	<b>-</b>
28 <b>Exchanges &amp; Settlements</b>		
29 RESIDENTIAL EXCHANGE PROGRAM	249,094	249,059
31 OTHER SETTLEMENTS	<u>0</u>	<u>0</u>
32 <b>Sub-Total</b>	<b>249,094</b>	<b>249,059</b>
33 <b>Renewable Generation</b>		
34 RENEWABLES	<u>36,523</u>	<u>34,869</u>
36 <b>Sub-Total</b>	<b>36,523</b>	<b>34,869</b>
37 <b>Generation Conservation</b>		
38 CONSERVATION INFRASTRUCTURE	27,296	27,296
39 LEGACY	590	590
40 MARKET TRANSFORMATION	12,050	12,050
41 ENERGY EFFICIENCY DEVELOPMENT	8,000	8,000
42 LOW INCOME WEATHERIZATION & TRIBAL	5,739	5,853
43 CONSERVATION ACQUISITION	67,000	67,000
44 DR & SMART GRID	<u>855</u>	<u>855</u>
45 <b>Sub-Total</b>	<b>121,530</b>	<b>121,644</b>
46 <b>Power System Generation Sub-Total</b>	<b>1,196,558</b>	<b>1,238,956</b>

Table 3A

**Power Services Program Spending Levels  
(\$000s)**

	A	B
	Rate Period	
	<u>2020</u>	<u>2021</u>
47		
48	<b>Power Non-Generation Operations</b>	
49	<b>Power Services System Operations</b>	
50	INFORMATION TECHNOLOGY	6,714 6,775
51	GENERATION PROJECT COORDINATION	6,059 6,205
52	SLICE IMPLEMENTATION	<u>555</u> <u>575</u>
53	<b>Sub-Total</b>	<b>13,329 13,555</b>
54	<b>Power Services Scheduling</b>	
55	OPERATIONS SCHEDULING	8,806 9,148
56	OPERATIONS PLANNING	<u>5,643</u> <u>5,839</u>
57	<b>Sub-Total</b>	<b>14,449 14,987</b>
58	<b>Power Services Marketing and Business Support</b>	
59	POWER R&D	2,662 2,666
60	SALES & SUPPORT	23,191 23,954
61	STRATEGY, FINANCE & RISK MGMT	16,905 17,092
62	EXECUTIVE AND ADMINISTRATIVE SERVICES	3,881 3,968
63	CONSERVATION SUPPORT	<u>8,399</u> <u>8,699</u>
64	<b>Sub-Total</b>	<b><u>55,038</u> <u>56,380</u></b>
65	<b>Power Non-Generation Operations Sub-Total</b>	<b>82,816 84,922</b>
66		
67	<b>Power Services Transmission Acquisition and Ancillary Services</b>	
68	<b>PBL Transmission Acquisition and Ancillary Services</b>	
69	POWER SERVICES TRANSMISSION & ANCILLARY SERVICES	109,528 105,053
70	3RD PARTY GTA WHEELING	96,200 96,200
71	POWER SERVICES - 3RD PARTY TRANS & ANCILLARY SVCS	2,338 2,384
72	GENERATION INTEGRATION	13,577 13,671
73	<b>Power Srvcs Trans Acquisition and Ancillary Services Sub-Total</b>	<b>221,643 217,308</b>
74		
75	<b>Fish and Wildlife/USF&amp;W/Planning Council/Environmental Req</b>	
76	BPA Fish and Wildlife	
77	Fish & Wildlife	249,603 250,031
78	USF&W Lower Snake Hatcheries	30,483 30,483
79	Planning Council	<u>11,725</u> <u>11,956</u>
80	<b>Fish and Wildlife/USF&amp;W/Planning Council Sub-Total</b>	<b>291,811 292,470</b>
81		
82	<b>BPA Internal Support</b>	
83	Additional Post-Retirement Contribution	19,577 20,831
84	Corporate G&A	47,031 46,794
85	F&W Corporate Support - G&A	<u>10,828</u> <u>10,850</u>
86	<b>BPA Internal Support Sub-Total</b>	<b>77,436 78,475</b>
87		

Table 3A

Power Services Program Spending Levels  
(\$000s)

		A	B
		Rate Period	
		<u>2020</u>	<u>2021</u>
88	<b>Bad Debt Expense</b>	0	0
89	<b>Other Income, Expenses, Adjustments</b>		(20,000)
90			
91			
92	<b>Disaggregation of Selected Expenses From Revenue Requirement to RAM Cost Table</b>		
93	<b>RENEWABLES (line 34)</b>	<u>36,523</u>	<u>34,869</u>
94	Tier 1 Augmentation Resource (i.e. Klondike III)	10,048	10,158
95	Renewable Generation (excl. Klondike III)	26,475	24,711
96			
97	<b>POWER R&amp;D (line 59)</b>	<u>2,662</u>	<u>2,666</u>
98	Generation Conservation R&D	1,654	1,657
99	Other Power R&D	1,008	1,010
100			
101	<b>POWER SERVICES TRANSMISSION &amp; ANCILLARY SERVICES (line 69)</b>	<u>109,528</u>	<u>105,053</u>
102	Transmission & Ancillary Services	77,500	73,025
103	Transmission & Ancillary Services (sys. oblig.)	32,028	32,028
104			
105	<b>Corporate G&amp;A (line 84)</b>	<u>47,031</u>	<u>46,794</u>
106	Agency Svs for Power	37,099	36,878
107	Agency Svs for Energy Efficiency	9,932	9,916

**Table 3B**

**Summary of Generation Repayment Study Data  
(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 INTEREST EXPENSE (GROSS)		
2 APPROPRIATIONS	44,685	45,908
3 BONDS ISSUED TO TREASURY	62,230	70,032
BOND PREMIUMS/DISCOUNTS	<u>13</u>	<u>10</u>
4 <b>TOTAL INTEREST EXPENSE</b>	<b>106,928</b>	<b>115,950</b>
5		
6 PLANNED AMORTIZATION		
7 APPROPRIATIONS	0	0
8 BONDS ISSUED TO TREASURY	<u>173,072</u>	<u>518,065</u>
9 <b>TOTAL GENERATION AMORTIZATION</b>	<b>173,072</b>	<b>518,065</b>
10 IRRIGATION ASSISTANCE	<u>24,331</u>	<u>14,747</u>
11 <b>TOTAL AMORTIZATION/IRRIGATION</b>	<b>197,403</b>	<b>532,812</b>

**Table 3C**  
**Depreciation & Amortization Summary**  
**(\$000s)**

	<b><u>A</u></b>	<b><u>B</u></b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 BPA (Power + CORP GP)	10,418	9,245
2 Corps 1/ 2/	100,017	102,628
3 Reclamation	<u>28,532</u>	<u>29,177</u>
<b>4 Total Depreciation</b>	<b>138,968</b>	<b>141,050</b>
5 Amortization of Legacy Conservation	17	-
6 Amortization of Conservation Acquisitions	42,078	42,078
7 Amortization of CRFM Intangible Investment	11,247	11,466
8 Amortization of Fish & Wildlife	<u>34,051</u>	<u>36,257</u>
9 Total Federal Amortization	<b>87,393</b>	<b>89,801</b>
10 Columbia Generating Station	149,823	150,977
11 WNP - 1	34,506	34,506
12 WNP - 3	42,630	42,630
13 Cowlitz Falls	5,267	5,267
14 Northern Wasco	1,940	1,940
15 CGS Asset Retirement Cost	<u>24,031</u>	<u>24,031</u>
16 Accretion of Asset Retirement Obligation	<u>33,738</u>	<u>35,213</u>
17 Total Non-Federal Amortization	<b>291,934</b>	<b>294,563</b>
<b>18 Total Amortization</b>	<b>379,327</b>	<b>384,364</b>
<b>17 Total Depreciation &amp; Amortization</b>	<b>518,295</b>	<b>525,414</b>
1/ Excludes depreciation from investments paid for by BPA-TS	23	23
2/ Includes US Fish & Wildlife	3,265	3,265

**Table 3D**  
**Separation of Residential Exchange Program Support Costs**  
**from Power Non-Generating Operations**  
**(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 Strategy, Finance, & Risk Mgmt	16,905	17,092
2 Residential Exchange Program Support portion	802	623
3 Net to Power Non-Generating Operations (ln 1 - ln 2)	16,103	16,470
4 Executive & Administrative Svc	3,881	3,968
5 Residential Exchange Program Support portion	1	1
6 Net to Power Non-Generating Operations (ln 4 - ln 5)	3,879	3,967
7 Residential Exchange Program Support (ln 2 + ln 5)	803	624
8 Strategy, Finance, & Risk Mgmt (to Pwr NonGen Ops) (ln 3)	16,103	16,470
9 Executive & Administrative Svc (to Pwr NonGen Ops) (ln 6)	3,879	3,967

**Table 3E**  
**Power Services Regulatory Assets**  
**(\$000s)**

		<u>A</u>	<u>B</u>
		<u>2020</u>	<u>2021</u>
1	Terminated Nuclear Facilities	77,135	77,135
2	REP Refunds	-	-
3	Columbia River Fish Mitigation amortization	11,247	11,466
4	Conservation Measures		
5	Additions	-	-
6	Amortization	42,095	42,078
7	Direct Service Industries' benefit 1/	-	-
8	Fish and Wildlife Measures		
9	Additions	47,266	47,266
10	Amortization	34,051	36,257
11	Settlements	22,997	22,997
12	FECA 2/	-	-
13	Sponsored Conservation	-	-
14	Trojan Decommissioning/Restoration	1,200	1,200
15	Terminated Hydro Facilities	1,940	1,940
16	Capitalized Bond Premiums	-	-

1/ This is now modeled in the rate case as a power sale with offsetting augmentation purchases if needed.

2/ Not specifically broken out in expenses



**Table 3F**  
**Allowance for Funds Used During Construction**  
**(\$000s)**

	<b><u>A</u></b> <b><u>2020</u></b>	<b><u>B</u></b> <b><u>2021</u></b>
<b>Direct Funding Projects</b>		
1 Capital Expenditures	238,000	256,000
2 Plant-in-Service	220,247	236,709
3 SOY CWIP Balance	491,243	508,996
4 EOY CWIP Balance	508,996	528,287
5 Average CWIP Balance	500,119	518,641
6 AFUDC Rate	3.18%	3.18%
7 Total Direct Funding AFUDC	15,904	16,493
<b>Capital Equipment</b>		
8 Power IT	3,900	3,900
9 Corporate	4,620	4,620
10 Total Capital Equipment AFUDC	244	271
11 <b>Total PS AFUDC</b>	<b>16,148</b>	<b>16,764</b>

**Table 3G**  
**Prepay Program Cost Components**  
**(\$000s)**

	A	B	C	D
		<u>Interest</u>	<u>Principal</u>	<u>Total Credit</u>
1	2013	7,653	7,647	15,300
2	2014	14,775	15,825	30,600
3	2015	14,041	16,559	30,600
4	2016	13,273	17,327	30,600
5	2017	12,469	18,131	30,600
6	2018	11,628	18,972	30,600
7	2019	10,747	19,853	30,600
8	2020	9,826	20,774	30,600
9	2021	8,863	21,737	30,600
10	2022	7,854	22,746	30,600
11	2023	6,799	23,801	30,600
12	2024	5,694	24,906	30,600
13	2025	4,539	26,061	30,600
14	2026	3,329	27,271	30,600
15	2027	2,064	28,536	30,600
16	2028	740	29,860	30,600
17	<b>Total</b>	<b>134,294</b>	<b>340,006</b>	<b>474,300</b>

**Table 3H**  
**Agency Services G&A Allocators**

	A COST POOL	B		C		D	E	F DRIVERS	G COMMENTS
		BP-20 Rates/IPR		BP-18 Rates		POWER	TRAN		
		POWER	TRAN	POWER	TRAN				
1	G&A EXEC/PLANNING/ GOVERNANCE	50%	50%	50%	50%	50%	50%	Standard rate with no consistent, measurable method of assigning support costs. Functions are general in nature. This rate does not get adjusted year-to-year.	In 2017: 75% labor-related cost, 14% supplemental labor cost. Cost charged into this pool were reviewed for appropriateness. Corporate awards were moved from this cost pool to a separate awards pool (XXZZ).
2	G&A CORPORATE APPLICATION ASSET	35%	65%	35%	65%	35%	65%	Applications in this cost pool follow the profile of benefiting Power and Transmission at a rate of 35%-65%. This rate does not get adjusted year-to-year but was reconfirmed in FY2018.	The Corporate applications included in this project pool fit the P/T profile of 35/65 to be in this IT application cost pool. In alignment with Corporate depreciation expense split and the "prevailing Agency P/T split rate" (based on prior FYs P/T split of allocated Corporate expense)
3	G&A SECURITY SERVICES	12%	88%	12%	88%	12%	88%	Rate established by a direction of effort study (time spent by security staff for Power and Transmission).	This cost pool includes security for the Transmission system and BPA administrative buildings. Headquarters is a very small part of the overall program. FY2015, 2016, 2017 actual costs and FY2018 budget for future costs were considered in the rate calculation.
4	G&A LEGAL SERVICES	50%	50%	50%	50%	50%	50%	Standard rate that does not get adjusted year-to-year.	No change from prior set allocations. Legal support office was created in FY2017. Per meeting with GC, all charges are consistent with expectations and Power and Transmission split is accurate. FY2015-17 costs were reviewed for appropriateness.
5	G&A HUMAN RESOURCE SERVICES	22%	78%	23%	77%	23%	77%	BFTE count by business unit.	Administrator's Award Program moved to its own pool. Transmission increased by 1%, Power decreased by 1%.
6	G&A FINANCE	46%	54%	45%	55%	45%	55%	Most costs in this pool are 50-50%. Exceptions are budget, payroll and AP. Rate impact for these costs are based on budget support for Power and Transmission, BFTE for payroll, and number of vouchers for AP.	Finance reorganized in FY2017. Workload of the FAC group was reallocated to FAB.
7	G&A SAFETY	5%	95%	6%	94%	6%	94%	Direction of effort study looking at business line program support provided by the Safety Tier 4 Depts.	Increase from 94% to 95% to the Transmission split. Decrease from 5% to 4% to Power due to change in the B/CFTE analysis percentage applied to the Power portion of the T/P split
8	RISK MANAGEMENT	62%	38%	62%	38%	62%	38%	Direction of effort study looking at risk support for Power and Transmission Services by Risk Deptlds.	No change, despite staffing and direction of effort change. 94% of 2017 costs were labor-related. Similar expectations for FY2018-2019.
9	G&A IT ADMINISTRATION & MANAGEMENT	29%	71%	29%	71%	29%	71%	Rate based on weighted average for the other IT cost pools (XXZB,XXZK,XXZL,XXZM).	No change. The small change to IT Infrastructure did not effect the output of the weighted average of all IT projects.
10	DEDICATED IT PROJECTS (for Power)	100%	0%	100%	0%	100%	0%	Dedicated applications for Power and Transmission Services. Rate does not get adjusted year-to-year.	No change. Project / work orders reviewed for reasonableness of the business line beneficiary (Power).
11	DEDICATED IT PROJECTS (for Trans)	0%	100%	0%	100%	0%	100%	Dedicated applications for Power and Transmission Services. Rate does not get adjusted year-to-year.	No change. Project / work orders reviewed for reasonableness of the business line beneficiary (Transmission).
12	G&A IT INFRASTRUCTURE ASSETS	21%	79%	22%	78%	22%	78%	Allocated headcount split = B/CFTE (badged employees) list broken into P/T/F&W/Corpt. Portion of F&W headcount allocated to P/T/Corpt. Portion of NW and NS allocated to T. Corpt allocated to P/T based on 35/65.	Small (1%) increase to Transmission / decrease to Power. No change to F&W. Driven by allocated P/T headcount split.
13	G&A CROSS AGENCY APPLICATION ASSETS	50%	50%	50%	50%	50%	50%	Standard agency rate that does not get adjusted year-to-year. Projects in this cost pool benefit Power and Transmission Services equally.	No change. Project / work orders reviewed for reasonableness of the business line beneficiary (equal P/T).
14	G&A WORKPLACE SERVICES	42%	58%	46%	54%	46%	54%	FY2017, use a combination of B/CFTE by location for other services, as applicable to the nature of the cost in this cost pool.	Trans rate change from 54% to 58%, Power from 46% to 42%. Changes due primarily to BFTE shifts.
15	SUPPLY CHAIN MANAGEMENT & ADMINISTRATION	8%	92%	11%	89%	11%	89%	Overall rate based on program level support by Supply Chain management.	3% Increase to Transmission to show the correct actual rate.
16	G&A PUBLIC AFFAIRS	50%	50%	50%	50%	50%	50%	Standard agency rate that does not get adjusted year-to-year.	FY15-17 Costs charged into this cost pool were reviewed for appropriateness. Increase to F&W as a result of Management's analysis.
17	SUPPLY CHAIN AGENCY PURCHASING	64%	36%	64%	36%	64%	36%	Weighted average of actual costs charged to environment, EE, Power, IT and Corporate work orders within the Agency Purchasing cost pool.	No change for Trans. F&W is down by 2%
18	BTO PORTFOLIO MANAGEMENT	50%	50%	50%	50%	50%	50%	Standard agency rate applied until definitive drivers are identified.	No changes, still a 50/50 cost pool per BTO management.
19	TECHNOLOGY INNOVATION	50%	50%	50%	50%	50%	50%	Standard agency rate that does not get adjusted year-to-year.	No change
20	G&A WORKPLACE DIRECT PROJECTS (for Trans)	0%	100%	0%	100%	0%	100%	Dedicated workplace services for Power and Transmission.	This is actually two cost pools, one for Power and one for Transmission. Van Mall, which includes One and Two Park Place and the 4400 building, are included in this cost pool. The 4400 building is new to the cost pool.
21	G&A WORKPLACE DIRECT PROJECTS (for Power)	100%	0%	100%	0%	100%	0%	Dedicated workplace services for Power and Transmission.	This is actually two cost pools, one for Power and one for Transmission. Van Mall, which includes One and Two Park Place and the 4400 building, are included in this cost pool. The 4400 building is new to the cost pool.
22	METERING & BILLING SERVICES	41%	59%	48%	52%	48%	52%	Direction of effort study with information provided by the responsible Dept managers.	Increase to Trans due to more workload for CCM/CDM associated with # of contracts, active tasks, contract templates, workflow and internal users of CCM and CDM.
23	FORECASTING & CONTRACT MANAGEMENT	56%	44%	47%	53%	47%	53%	Direction of effort study with information provided by the responsible Dept managers.	Increase to Power due to more workload for CCM/CDM associated with # of contracts, active tasks, contract templates, workflow and internal users of CCM and CDM.
24	AGENCY SERVICES AWARDS	40%	60%	40%	60%	40%	60%	Based on overall Corporate G&A personnel costs for Power and Transmission	No change. Average FY15-17 less \$1.9M projected time-off award.

**Table 3I**  
**Interest Adjustment for Monthly 4(h)(10)(C) Credits**  
**(\$000s)**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	<u>Forecast</u>	<u>Adjustment</u>	<u>Net Credit for</u>											
	<u>Annual Credit</u>	<u>Factor</u>	<u>Calculation</u>											
1	2020	86,450	10,000	76,450										
2	2021	87,690	10,000	77,690										
3														
4	<b>Wgtd Ave Interest Rate</b>													
5	2020	3.277%												
6	2021	3.399%												
7														
8														
9	<b>Calculation of Savings</b>													
10														
11														
12	<b>FY 2020</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	
13	Payment Accrual	11.5%	12.8%	10.3%	7.7%	2.6%	10.4%	7.0%	9.9%	9.9%	1.4%	8.3%	8.1%	
14	Fish Credits	-	11,027	8,901	6,681	2,276	8,976	6,087	8,563	8,563	1,173	7,158	7,044	
15	Cumulative	-	11,027	19,928	26,608	28,885	37,861	43,948	52,511	61,075	62,248	69,406	76,450	
16														
17	Principal Paid	-		19,766	6,609	2,246	8,831	5,973	8,380	8,358	1,142	6,949	6,820	75,074
18	Interest Paid	-		162	72	31	145	114	183	205	31	209	224	1,376
19	Interest Saved	-		486	144	43	145	82	92	68	6	19	-	<b>1,085</b>
20														
21	<b>FY 2021</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	
22	Payment Accrual	11.5%	12.8%	10.3%	7.7%	2.6%	10.4%	7.0%	9.9%	9.9%	1.4%	8.3%	8.1%	
23	Fish Credits	92	11,236	9,029	6,777	2,309	9,105	6,174	8,686	8,686	1,190	7,261	7,145	
24	Cumulative	92	11,328	20,357	27,134	29,443	38,548	44,722	53,408	62,094	63,285	70,545	77,690	
25														
26	Principal Paid			20,192	6,703	2,278	8,958	6,058	8,501	8,478	1,159	7,049	6,918	74,508
27	Interest Paid			172	76	32	152	120	193	216	33	220	235	1,073
28	Interest Saved			496	146	44	147	83	93	69	6	19	-	<b>1,112</b>

**Table 3J**

**Debt to Asset Ratio Calculation**  
(\$000s)

	Actuals			
<b>DEBT</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
1 Starting federal debt		4,026,824	3,793,565	3,964,928
2 Federal debt additions		265,074	344,435	384,695
3 Treasury bond repayment		(271,250)	(173,072)	(518,065)
4 Appropriations repayment		(227,083)	-	-
5 Ending federal debt	4,026,824	3,793,565	3,964,928	3,831,558
6				
7 Starting nonfederal debt		5,426,014	5,136,608	4,872,785
8 EN debt additions 1/		294,717	99,320	66,984
9 EN bond repayment		(418,335)	(110,230)	(104,205)
10 EN LOC repayment		(141,000)	(227,000)	-
11 N. Wasco repayment		(1,460)	(1,490)	(1,535)
12 Cowlitz Falls repayment		(3,475)	(3,650)	(3,830)
13 Prepay principal repayment		(19,853)	(20,774)	(21,737)
14 Ending nonfederal debt	5,426,014	5,136,608	4,872,785	4,808,461
15				
16 Total Debt	9,452,838	8,930,173	8,837,713	8,640,019
17				
18 <b>ASSETS</b>				
19 Starting gross federal assets		9,351,271	9,690,536	10,018,540
20 Federal plant additions		339,265	328,003	370,284
21 Ending gross federal assets	9,351,271	9,690,536	10,018,540	10,388,824
22				
23 Starting accumulated fed. depreciation		(3,518,882)	(3,655,271)	(3,794,239)
24 Annual federal depreciation		(136,389)	(138,968)	(141,050)
25 Ending accumulated fed. depreciation	(3,518,882)	(3,655,271)	(3,794,239)	(3,935,289)
26				
27 Starting gross nonfederal assets		3,350,904	4,013,387	4,112,707
28 Nonfederal plant additions 2/		662,483	99,320	66,984
29 Ending gross nonfederal assets 3/	3,350,904	4,013,387	4,112,707	4,179,691
30				
31 Accumulated nonfed amortization 4/		-	(419,180)	(598,301)
32 Annual nonfed amortization		(419,180)	(179,121)	(180,275)
33 Ending accumulated nonfederal amort.		(419,180)	(598,301)	(778,576)
34				
35 Sale of nonfederal assets (fuel)		(189,500)	(72,500)	(81,000)
36 Cummulative sale	-	(189,500)	(262,000)	(343,000)
37				
38				
39 CWIP	683,567	683,567	683,567	683,567
40 Total Assets	9,866,860	10,123,539	10,160,274	10,195,218
41				
42 <b>Debt to Asset Ratio (Debt/Asset)</b>	95.80%	88.21%	86.98%	84.75%

1/ Includes lines of credit

2/ Includes addition of CGS asset retirement cost asset

3/ Actual ending nonfederal asset value is net of amortization.

4/ Prior to FY 2020, nonfederal amortization matched the repayment of debt. Starting in FY 2020, nonfederal amortization is calculated on a straight-line basis.

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## **4. FCRPS GENERATION INVESTMENT BASE**

### **4.1 Introduction**

This chapter documents the development of the FCRPS generation investment base by year for the rate approval period and the outyears. The investment data are the source of depreciation calculations and provide certain inputs to the generation repayment studies. It is also the basis for allocations of net interest expense and planned net revenues in the development of the COSA tables and the generation inputs to ancillary services.

### **4.2 Methodology**

The FCRPS plant investment information is separately compiled for the Corps, Reclamation, and BPA, including BPA conservation and fish and wildlife investments. BPA generation (general) plant investment consists of office furniture and fixtures and data processing software and hardware associated with the Power Business Line, including the Energy Efficiency Group. Historical investment data are taken from the supporting documents of FCRPS financial statements. All plant investment is depreciated and intangible plant is amortized using the straight-line method.

For BPA facilities, forecasted depreciation expense is calculated consistent with the group concept methodology used for plant accounting records. For general plant categories, average service lives incorporate an adjustment for salvage applicable to the individual groups. Both historical investment and forecast additions are depreciated according to their adjusted group life.

BPA conservation acquisition investments made after 2011 are amortized over 12 years. Beginning with 2016, BPA discontinued the capitalization of conservation investments and converted it into an expense program. Legacy conservation investments occurred through FY 1999 and have a 20 year life. All other conservation investments have been fully amortized and no longer appear in the revenue requirement.

BPA fish and wildlife investments are amortized over 15 years.

Corps and Reclamation investments are depreciated according to the weighted-average service lives of the projects. Depreciation forecasts factor in plant retirements using the 5-year average of plant retirement by project

Projected investments and projected depreciation expenses are accumulated with historical amounts to provide projected cumulative investments and accumulated depreciation for each forecasted year.

The investment base is calculated for each year of the rate period and outyears as an annual average.

### **4.3 Non-Federal Amortization**

Energy Northwest projects are amortized through December 31, 2043 which is the end of the license of CGS. The amortization of the CGS asset includes plant additions due to continuing

capital investments and plant reductions as fuel acquired through the uranium tails project is sold to the Tennessee Valley Authority. Northern Wasco and Cowlitz Falls are amortized over the remaining life of their respective debt. Amortization expense also includes the amortization of the CGS asset retirement cost and the accretion of the CGS asset retirement liability.



Table 4A

**FCRPS Investment Base  
FY 2020  
(\$000s)**

	A	B	C
	BALANCE-AS-OF		AVERAGE
	<u>9/30/2019</u>	<u>9/30/2020</u>	<u>2020</u>
<b>1 CORPS OF ENGINEERS</b>			
2 COMPLETED PLANT			
3 HYDROELECTRIC GEN	8,260,936	8,462,043	8,361,489
4 TRANSMISSION	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>
<b>5 TOTAL COMPLETED PLANT</b>	<b>8,263,636</b>	<b>8,464,743</b>	<b>8,364,189</b>
6 ACCUMULATED DEPRECIATION			
7 HYDROELECTRIC GEN	3,367,823	3,479,074	3,423,449
8 TRANSMISSION	<u>1,038</u>	<u>1,074</u>	<u>1,056</u>
<b>9 TOTAL ACCUMULATED DEPRECIATION</b>	<b>3,368,861</b>	<b>3,480,148</b>	<b>3,424,505</b>
10 NET COMPLETED PLANT			
11 HYDROELECTRIC GEN	4,893,113	4,982,968	4,938,040
12 TRANSMISSION	<u>1,662</u>	<u>1,626</u>	<u>1,644</u>
<b>13 TOTAL NET COMPLETED PLANT</b>	<b>4,894,775</b>	<b>4,984,594</b>	<b>4,939,684</b>
<b>14 BUREAU OF RECLAMATION</b>			
15 COMPLETED PLANT			
16 HYDROELECTRIC GEN	2,020,156	2,071,481	2,045,818
17 TRANSMISSION	<u>94,065</u>	<u>94,065</u>	<u>94,065</u>
<b>18 TOTAL COMPLETED PLANT</b>	<b>2,114,221</b>	<b>2,165,546</b>	<b>2,139,883</b>
19 ACCUMULATED DEPRECIATION			
20 HYDROELECTRIC GEN	768,093	795,371	781,732
21 TRANSMISSION	<u>35,993</u>	<u>37,247</u>	<u>36,620</u>
<b>22 TOTAL ACCUM DEPRECIATION</b>	<b>804,087</b>	<b>832,619</b>	<b>818,352</b>
23 NET COMPLETED PLANT			
24 HYDROELECTRIC GEN	1,252,062	1,276,110	1,264,086
25 TRANSMISSION	<u>58,072</u>	<u>56,818</u>	<u>57,445</u>
<b>26 TOTAL NET COMPLETED PLANT</b>	<b>1,310,134</b>	<b>1,332,927</b>	<b>1,321,531</b>
<b>27 CONSERVATION</b>			
28 CUMULATIVE INVESTMENT	1,859,747	1,859,764	1,859,756
29 ACCUM PREPAID EXPENSE	<u>1,652,222</u>	<u>1,694,318</u>	<u>1,673,270</u>
<b>30 NET CONSERVATION</b>	<b>207,525</b>	<b>165,446</b>	<b>186,486</b>
<b>31 FISH AND WILDLIFE</b>			
32 CUMULATIVE INVESTMENT	497,799	531,103	514,451
33 ACCUM PREPAID EXPENSE	<u>276,092</u>	<u>276,092</u>	<u>276,092</u>
<b>34 NET FISH AND WILDLIFE</b>	<b>221,707</b>	<b>255,012</b>	<b>238,359</b>
<b>35 BPA PLANT (PBL)</b>			
36 CUMULATIVE INVESTMENT	182,065	190,585	186,325
37 ACCUMULATED DEPRECIATION	<u>144,563</u>	<u>154,982</u>	<u>149,773</u>
<b>38 NET BPA PLANT INVESTMENT</b>	<b>37,502</b>	<b>35,603</b>	<b>36,552</b>
<b>39 TOTAL NET PLANT INVESTMENT</b>	<b>6,671,642</b>	<b>6,773,583</b>	<b>6,722,612</b>

Table 4B

**FCRPS Investment Base  
FY 2021  
(\$000s)**

	A	B	C
	BALANCE-AS-OF		AVERAGE
	<u>9/30/2020</u>	<u>9/30/2021</u>	<u>2021</u>
<b>1 CORPS OF ENGINEERS</b>			
2 COMPLETED PLANT			
3 HYDROELECTRIC GEN	8,462,043	8,706,809	8,584,426
4 TRANSMISSION	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>
<b>5 TOTAL COMPLETED PLANT</b>	<b>8,464,743</b>	<b>8,709,509</b>	<b>8,587,126</b>
6 ACCUMULATED DEPRECIATION			
7 HYDROELECTRIC GEN	3,479,074	3,593,155	3,536,115
8 TRANSMISSION	<u>1,074</u>	<u>1,110</u>	<u>1,092</u>
<b>9 TOTAL ACCUMULATED DEPRECIATION</b>	<b>3,480,148</b>	<b>3,594,265</b>	<b>3,537,207</b>
10 NET COMPLETED PLANT			
11 HYDROELECTRIC GEN	4,982,968	5,113,654	5,048,311
12 TRANSMISSION	<u>1,626</u>	<u>1,590</u>	<u>1,608</u>
<b>13 TOTAL NET COMPLETED PLANT</b>	<b>4,984,594</b>	<b>5,115,244</b>	<b>5,049,919</b>
<b>14 BUREAU OF RECLAMATION</b>			
15 COMPLETED PLANT			
16 HYDROELECTRIC GEN	2,071,481	2,117,114	2,094,298
17 TRANSMISSION	<u>94,065</u>	<u>94,065</u>	<u>94,065</u>
<b>18 TOTAL COMPLETED PLANT</b>	<b>2,165,546</b>	<b>2,211,179</b>	<b>2,188,363</b>
19 ACCUMULATED DEPRECIATION			
20 HYDROELECTRIC GEN	795,371	823,294	809,333
21 TRANSMISSION	<u>37,247</u>	<u>38,502</u>	<u>37,875</u>
<b>22 TOTAL ACCUM DEPRECIATION</b>	<b>832,619</b>	<b>861,796</b>	<b>847,208</b>
23 NET COMPLETED PLANT			
24 HYDROELECTRIC GEN	1,276,110	1,293,820	1,284,965
25 TRANSMISSION	<u>56,818</u>	<u>55,563</u>	<u>56,190</u>
<b>26 TOTAL NET COMPLETED PLANT</b>	<b>1,332,927</b>	<b>1,349,383</b>	<b>1,341,155</b>
<b>27 CONSERVATION</b>			
28 CUMULATIVE INVESTMENT	1,859,764	1,859,764	1,859,764
29 ACCUM PREPAID EXPENSE	<u>1,694,318</u>	<u>1,736,396</u>	<u>1,715,357</u>
30 NET CONSERVATION	<b>165,446</b>	<b>123,368</b>	<b>144,407</b>
<b>31 FISH AND WILDLIFE</b>			
32 CUMULATIVE INVESTMENT	531,103	544,622	537,863
33 ACCUM PREPAID EXPENSE	<u>276,092</u>	<u>278,602</u>	<u>277,347</u>
34 NET FISH AND WILDLIFE	<b>255,012</b>	<b>266,021</b>	<b>260,516</b>
<b>35 BPA PLANT (PBL)</b>			
36 CUMULATIVE INVESTMENT	190,585	199,105	194,845
37 ACCUMULATED DEPRECIATION	<u>154,982</u>	<u>164,227</u>	<u>159,604</u>
38 NET BPA PLANT INVESTMENT	<b>35,603</b>	<b>34,878</b>	<b>35,241</b>
<b>39 TOTAL NET PLANT INVESTMENT</b>	<b>6,773,583</b>	<b>6,888,894</b>	<b>6,831,238</b>

**Table 4C**  
(\$000s)

**FERC ACCOUNT 391.2 DATA PROCESSING EQUIPMENT**  
**ASL, Remaining Life, Annual Percent=20%**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
	<b><u>FY</u></b>	<b><u>INVEST</u></b>	<b><u>FIRST YEAR</u></b>	<b><u>FULL YEAR</u></b>	<b><u>ANNUAL DEPR</u></b>	<b><u>ACCUM DEPR</u></b>	<b><u>CUMUL INVEST</u></b>	<b><u>NET INVEST</u></b>
1	2019	-	-	-	2,737	35,310	38,054	2,745
2	2020	-	-	-	1,447	36,757	38,054	1,298
3	2021	-	-	-	1,298	38,054	38,054	-

**Table 4D**  
(\$000s)

**FERC ACCOUNT 391.3 DATA PROCESSING SOFTWARE**  
ASL, Remaining Life, Annual Percent=20% **18.33%** as of FY 2006

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>
	<b>FY</b>	<b>INVEST</b>	<b>FIRST YEAR</b>	<b>FULL YEAR</b>	<b>ANNUAL DEPR</b>	<b>ACCUM DEPR</b>	<b>CUMUL INVEST</b>	<b>NET INVEST</b>	<b>CORP ADDITNS</b>	<b>PS ADDITNS</b>
1	2019	10,649	800	1,600	7,033	103,196	130,035	26,839	4,453	6,197
2	2020	8,520	640	1,280	6,717	109,913	138,555	28,642	4,620	3,900
3	2021	8,520	640	1,280	6,834	116,747	147,075	30,328	4,620	3,900

**Table 4E**  
(\$000s)

**FERC ACCOUNT 397/398 COMMUNICATION/MISC EQUIPMENT**  
ASL, Remaining Life, Annual Percent=6.70%

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
	<b>FY</b>	<b>INVEST</b>	<b>FIRST YEAR</b>	<b>FULL YEAR</b>	<b>ANNUAL DEPR</b>	<b>ACCUM DEPR</b>	<b>CUMUL INVEST</b>	<b>NET INVEST</b>
1	2019	-	-	-	-	964	6,885	12,067 5181.1975
2	2020	-	-	-	-	964	7,850	12,067 4216.9963
3	2021	-	-	-	-	964	8,814	12,067 3252.795

**Table 4F**  
(\$000s)

**SUMMARY - PBL GENERAL PLANT**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
	<b>FY</b>	<b>ANNUAL DEPR</b>	<b>ACCUM DEPR</b>	<b>CUMUL INVEST</b>	<b>NET INVEST</b>
1	2019	11,437	144,563	182,065	37,502
2	2020	10,418	154,982	190,585	35,603
3	2021	9,245	164,227	199,105	34,878

Table 4G

**BPA FISH & WILDLIFE INVESTMENT**  
(\$000s)

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
	<b><u>FY</u></b>	<b><u>INVEST</u></b>	<b><u>FIRST YEAR</u></b>	<b><u>FULL YEAR</u></b>	<b><u>ANNUAL AMORT</u></b>	<b><u>ACCUM AMORT</u></b>	<b><u>CUMUL INVEST</u></b>	<b><u>NET INVEST</u></b>
1	2019	35,000	1,167	2,333	33,040	256,003	497,799	241,796
2	2020	47,266	1,576	3,151	34,051	276,092	531,103	255,012
3	2021	47,266	1,576	3,151	36,257	278,602	544,622	266,021

Table 4H

**AMORTIZATION OF BPA CONSERVATION INVESTMENT**  
12-year Life (post-2011 investments)  
(\$000s)

**Conservation Acquisition, 12-year life (post-2011)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
	<b><u>FY</u></b>	<b><u>INVEST</u></b>	<b><u>FIRST YEAR</u></b>	<b><u>FULL YEAR</u></b>	<b><u>ANNUAL AMORT</u></b>	<b><u>ACCUM AMORT</u></b>	<b><u>CUMUL INVEST</u></b>	<b><u>NET INVEST</u></b>
1	2019		-	-	42,078	277,226	484,750	207,524
2	2020		-	-	42,078	319,304	484,750	165,446
3	2021		-	-	42,078	361,382	484,750	123,368
4	2022				42,078	403,461	484,750	81,289
5	2023				32,975	436,436	484,750	48,314
6	2024				22,255	458,691	484,750	26,059
7	2025				16,422	475,113	484,750	9,637
8	2026				8,450	483,563	484,750	1,187
9	2027				1,132	484,695	484,750	55
10	2028				55	-	-	-

**Legacy, 20-year life (pre-2000)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
	<b><u>FY</u></b>	<b><u>INVEST</u></b>	<b><u>FIRST YEAR</u></b>	<b><u>FULL YEAR</u></b>	<b><u>ANNUAL AMORT</u></b>	<b><u>ACCUM AMORT</u></b>	<b><u>CUMUL INVEST</u></b>	<b><u>NET INVEST</u></b>
1	2019	-	-	-	367	1,211,345	1,211,362	17
2	2020	-	-	-	17	1,211,362	1,211,362	-
3	2021	-	-	-	-	1,211,362	1,211,362	-

**Table 4I**  
**Bureau of Reclamation:**  
**Investment and Depreciation**  
**(\$000s)**

	A	B	C	D	E	F	G	H	I	J	K
1											
2											
3		<b>5-Year</b>		<b>2020</b>	<b>2020</b>	<b>2020</b>		<b>2021</b>	<b>2021</b>	<b>2021</b>	
4		<b>Average</b>	<b>INVESTMENT</b>		<b>DEPR</b>	<b>ACCUM</b>	<b>INVESTMENT</b>		<b>DEPR</b>	<b>ACCUM</b>	<b>INVESTMENT</b>
5		<b>Retirements</b>	<b>9/30/19</b>	<b>ADDTNS</b>	<b>EXP</b>	<b>DEPR</b>	<b>9/30/20</b>	<b>ADDTNS</b>	<b>EXP</b>	<b>DEPR</b>	<b>9/30/21</b>
6	<b>BOISE</b>										
7	GENERATION	1	37,366	1,316	507	13,958	38,681	3,832	541	14,499	42,512
8	<b>COLUMBIA BASIN</b>										
9	GENERATION	197	1,623,919	35,936	21,891	646,651	1,659,658	26,954	22,307	668,958	1,686,415
10	TRANSMISSION /DELIVERY		91,097		1,215	35,874	91,097		1,215	37,089	91,097
11	<b>TOTAL</b>		1,715,016	35,936	23,106	682,526	1,750,755	26,954	23,522	706,048	1,777,512
12	<b>GREEN SPRINGS</b>										
13	GENERATION	-	19,362	758	263	9,696	20,120	-	268	9,964	20,120
14	<b>HUNGRY HORSE</b>										
15	GENERATION	4	149,977	7,586	2,050	70,768	157,560	11,872	2,180	72,948	169,427
16	TRANSMISSION /DELIVERY		1,745		23	919	1,745		23	942	1,745
17	<b>TOTAL</b>		151,722	7,586	2,073	71,687	159,305	11,872	2,203	73,890	171,172
18	<b>MINIDOKA-PALISADES</b>										
19	GENERATION	34	168,814	5,536	2,288	48,364	174,316	1,054	2,331	50,695	175,336
20	TRANSMISSION /DELIVERY		1,223		16	454	1,223		16	470	1,223
21	<b>TOTAL</b>		170,037	5,536	2,304	48,818	175,539	1,054	2,347	51,165	176,559
22	<b>YAKIMA</b>										
23	GENERATION	-	20,717	429	279	5,934	21,146	2,158	296	6,230	23,304
24	<b>TOTAL USBR</b>		2,114,221		28,532	832,619	2,165,546		29,177	861,796	2,211,179
25											
26	GENERATION		2,020,156		27,278	795,371	2,071,481		27,923	823,294	2,117,114
27	TRANSMISSION		94,065		1,254	37,247	94,065		1,254	38,502	94,065
28	<b>TOTAL</b>		2,114,221		28,532	832,619	2,165,546		29,177	861,796	2,211,179

Table 4J

Corps of Engineers: Investment and Depreciation  
(\$000s)

	A	B	C	D	E	F	G	H	I	J	K	L
1			5-Year		2020	2020	2020		2021	2021	2021	
2			Average	INVESTMENT		DEPR	ACCUM	INVESTMENT		DEPR	ACCUM	INVESTMENT
3			<u>Retirements</u>	<u>9/30/19</u>	<u>ADDTNS</u>	<u>EXP</u>	<u>DEPR</u>	<u>9/30/20</u>	<u>ADDTNS</u>	<u>EXP</u>	<u>DEPR</u>	<u>9/30/21</u>
4		BONNEVILLE										
5		GENERATION	559	1,184,965	17,325	15,911	548,333	1,201,731	16,778	16,131	564,464	1,217,950
6		TRANSMISSION		<u>2,700</u>		<u>36</u>	<u>1,074</u>	<u>2,700</u>		<u>36</u>	<u>1,110</u>	<u>2,700</u>
7		<b>TOTAL</b>		<b>1,187,665</b>	<b>17,325</b>	<b>15,947</b>	<b>549,407</b>	<b>1,204,431</b>	<b>16,778</b>	<b>16,167</b>	<b>565,574</b>	<b>1,220,650</b>
8		OTHER PROJECTS										
9		(GENERATION ONLY)										
10		ALBENI FALLS	133	80,167	3,179	1,089	30,912	83,213	1,880	1,121	32,033	84,960
11		CHIEF JOSEPH	261	870,820	12,852	11,695	404,092	883,411	27,783	11,962	416,054	910,933
12		COUGAR	16	55,692	403	745	18,436	56,080	1,021	754	19,190	57,085
13		DETROIT-BIG CLIFF	24	106,805	2,791	1,443	44,696	109,572	1,613	1,472	46,168	111,161
14		DWORSHAK	54	343,768	7,626	4,634	158,201	351,340	4,631	4,715	162,916	355,917
15		GREEN PETER-FOSTER	9	73,644	1,969	995	33,528	75,604	733	1,013	34,541	76,328
16		HILLS CREEK	0	54,077	670	725	18,131	54,746	1,158	738	18,869	55,905
17		ICE HARBOR	49	230,189	14,355	3,165	115,688	244,496	15,065	3,360	119,048	259,511
18		JOHN DAY	251	613,862	27,782	8,368	304,960	641,394	35,396	8,786	313,746	676,538
19		LIBBY	526	467,358	2,216	6,243	221,512	469,049	5,625	6,288	227,800	474,147
20		LITTLE GOOSE	38	278,709	8,133	3,770	141,646	286,804	7,830	3,876	145,522	294,597
21		LOOKOUT POINT-DEXTER	587	134,906	4,172	1,823	55,944	138,491	1,978	1,856	57,800	139,882
22		LOST CREEK	0	41,256	55	550	18,217	41,311	135	552	18,769	41,446
23		LOWER GRANITE	29	433,978	5,421	5,822	202,455	439,370	6,383	5,901	208,356	445,724
24		LOWER MONUMENTAL	33	287,508	3,914	3,859	157,802	291,389	6,512	3,928	161,730	297,868
25		MCNARY	87	516,913	39,617	7,156	264,748	556,443	46,354	7,728	272,476	602,710
26		THE DALLES	320	511,471	16,205	6,926	282,016	527,355	9,966	7,096	289,112	537,001
27		LOWER SNAKE F&W		252,118	0	3,362	69,197	252,118	0	3,362	72,559	252,118
28		COLUMBIA R. FISH BYPASS	154	<u>1,722,729</u>	<u>35,551</u>	<u>22,970</u>	<u>388,560</u>	<u>1,758,126</u>	<u>57,057</u>	<u>23,442</u>	<u>412,002</u>	<u>1,815,029</u>
29		<b>TOTAL OTHER</b>		<b>7,075,971</b>	<b>186,911</b>	<b>95,340</b>	<b>2,930,741</b>	<b>7,260,312</b>	<b>231,118</b>	<b>97,950</b>	<b>3,028,691</b>	<b>7,488,859</b>
30												
31		<b>TOTAL CORPS</b>		<b>8,263,636</b>	<b>204,237</b>	<b>111,287</b>	<b>3,480,148</b>	<b>8,464,743</b>	<b>247,897</b>	<b>114,117</b>	<b>3,594,265</b>	<b>8,709,509</b>
32												
33		GENERATION		8,260,936		111,251	3,479,074	8,462,043		114,081	3,593,155	8,706,809
34		TRANSMISSION		<u>2,700</u>		<u>36</u>	<u>1,074</u>	<u>2,700</u>		<u>36</u>	<u>1,110</u>	<u>2,700</u>
35		<b>TOTAL</b>		<b>8,263,636</b>		<b>111,287</b>	<b>3,480,148</b>	<b>8,464,743</b>		<b>114,117</b>	<b>3,594,265</b>	<b>8,709,509</b>
36												
37		<sup>1/</sup> Includes USFW Plant Investment		244,851		3,265	69,547	244,851		3,265	72,812	244,851
38		<sup>2/</sup> Includes Regulatory Asset		843,495	16,432	11,247	112,531	859,927	14,411	11,466	123,997	874,338

**Table 4K**  
**Amortization Expense, Columbia Generating Station**  
(\$000s)

A	B	C	D
	<b>Starting balance</b>	<b>2020</b>	<b>2021</b>
1	3,633,211	149,823	149,823
2			
3	Additions		
4	2020 99,320	-	4,272
5	2021 66,984	-	-
6	Total 2,570,935	-	4,272
7			
8	Adjustment for Asset Sale (Fuel)		
9	2020 (72,500)	-	(3,118)
10	2021 (81,000)	-	-
11	Total	-	(3,118)
12			
13	CGS Total	149,823	150,977

**Table 4L**  
**Amortization Expense, WNP-1, WNP-3,**  
**N. Wasco, Cowlitz Falls**  
(\$000s)

A	B	C	D
1	<b>WNP-1 Starting balance</b>	<b>2020</b>	<b>2021</b>
2	836,762	34,506	34,506
3			
4			
5	<b>WNP-3 Starting balance</b>	<b>2020</b>	<b>2021</b>
6	1,033,769	42,630	42,630
7			
8	<b>N. Wasco Starting balance</b>	<b>2020</b>	<b>2021</b>
9	11,639	1,940	1,940
10			
11	<b>Cowlitz Starting balance</b>	<b>2020</b>	<b>2021</b>
12	68,470	5,267	5,267



**Table 4M**  
**Amortization CGS Asset Retirement Cost (ARC)**  
**(\$000s)**

		<b>A</b>	<b>B</b>
		<b>Annual Amortization</b>	<b>Balance</b>
		Beginning	594,766
1	2020	24,031	570,735
2	2021	24,031	546,704

**Table 4N**  
**Accretion of CGS Asset Retirement Obligation (ARO)**  
**(\$000s)**

		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
		<b>Base ARO</b>	<b>Base Accretion</b>	<b>Additional ARO</b>	<b>Additional Accretion</b>	<b>Total Accretion</b>
1	2019	170,240	4,452	594,766	12,056	16,508
2	2020	174,692	9,136	606,822	24,601	33,738
3	2021	183,828	9,614	631,424	25,599	35,213

Notes:

Base ARO refers to the original asset retirement obligation in place before the 2018-19 study.

Additional ARO refers to the additional liability identified in the 2018-19 study.

**Table 4O**  
**Summary, Non-Federal Amortization Expense**  
**(\$000s)**

	<b>A</b>	<b>B</b>	<b>C</b>
	<b>Project</b>	<b>2020</b>	<b>2021</b>
1	CGS	149,823	150,977
2	WNP 1	34,506	34,506
3	WNP 3	42,630	42,630
4	N. Wasco	1,940	1,940
5	Cowlitz Falls	5,267	5,267
6	CGS ARC	24,031	24,031
7	CGS ARO Accretion	33,738	35,213
8	Total	234,165	235,319

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## **5. PROJECTED CASH BALANCES / INTEREST CREDITS**

### **5.1 Introduction**

This chapter documents the projection of the generation interest income (credited to interest expense) to be earned during the rate approval period and the outyears on BPA's projected cash balances and on funds attributable to generation to be returned to Treasury at year-end.

### **5.2 Interest credits on projected reserves**

The internal cash flows from revenue requirements are added to the ending rate period reserves for risk balances separately for the program and averaged. Reserves not for risk is assumed to be stable through the rate period. The projected interest earnings rate is multiplied by the average reserves balance to determine the annual interest income on the BPA Fund/Investments. The resulting interest income is applied as a credit against interest expense in the generation revenue requirements.

The starting reserves for risk for FY 2020 includes a one-time adjustment in FY 2019 to rebalance reserves between the power and transmission business units. The adjustment was forecast to be \$330 million reallocated from transmission to power. Future rate cases will reflect the actual, final adjustment made in FY 2019.

### **5.3 Interest income (repayment program calculation)**

The interest income rates listed in this chapter are calculated and used in repayment studies to determine an interest income credit on funds collected during each year for year-end payment of amortization and interest on Corps and Reclamation appropriations and bonds BPA issued to Treasury. The repayment program assumes that cash accumulates at a uniform rate throughout the year, except for interest paid on bonds issued to Treasury at mid-year. In the repayment study output, such as in Table 11C of this document, the interest income is identified as the "float."

### **5.4 Allocation of Interest Credit**

The interest credit is a component in the calculation of net interest, offsetting interest accrued on outstanding Treasury bonds and appropriations. The credit is allocated between the two cost pools. The Composite cost pool receives an interest credit based on \$586 million in reserves, the amount of reserves attributed to Power at the end of FY 2001, with adjustments. The amount of reserves has been adjusted for receipts/payments related to pre-2002 transactions that have not been distributed to Slice customers.

The Non-Slice cost pool receives a credit that is the net of the total annual credit calculated in the generation revenue requirement less the amount calculated for the Composite cost pool and the interest earned on the prepay funds. The Non-Slice allocation may be negative or positive depending on the relationship between the Composite cost pool allocation and the total annual credit.

## **5.5 CGS Decommissioning Trust**

Beginning in FY 2020, BPA will begin recording interest income on the CGS Decommissioning Trust and the realized gains and losses on the value of investments in the Trust on BPA's income statement. Interest income and gains/losses are forecast using historical averages for the Trust.

**TABLE 5A**  
**Interest Income from Projected Cash Balances**  
**Generation Revenue Requirement**  
**(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
<b>Calculation of Total Interest Income</b>		
1 Cash flow generated	0	0
2		
<b>3 Reserves for Risk</b>		
4 SOY Cash Balance	288,052	288,052
5 EOY Cash Balance	288,052	288,052
6 Average Cash Balance	288,052	288,052
7		
8 Interest Income Rate	0.90%	0.94%
9 Interest on BPA Fund/Investments	2,592	2,693
10		
11 Repayment Study Interest Credit	1,225	2,874
12		
13 Reserves not for Risk		
14 SOY Cash Balance	126,832	126,832
15 EOY Cash Balance	126,832	126,832
16 Average Cash Balance	126,832	126,832
17 Interest Income	1,141	1,186
18		
19 Total Interest Credit (ln 8 + 10 + 16 )	4,959	6,753
20		
21		
<b>22 Allocation between TRM Cost Pools</b>	<b><u>2020</u></b>	<b><u>2021</u></b>
23 Reserves for Composite Cost Pool	586,596	586,596
24 Interest rate	0.90%	0.94%
25 Composite Pool interest credit (ln 22 X ln 23)	(5,279)	(5,485)
26 Total interest credit from Rev Req	(4,959)	(6,753)
27 Non-Slice Pool interest credit (ln 25 - ln 24)	320	(1,268)

**Table 5B**  
**Interest Income from Projected Cash Balances**  
**Generation Current Revenue Test**  
**(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 Annual Cash Surplus/(Deficit)	(4,819)	(33,263)
2		
3 <b>Reserves for Risk</b>		
4 SOY Cash Balance	288,052	283,233
5 EOY Cash Balance	283,233	249,970
6 Average Cash Balance	285,643	266,602
7		
8 Interest Income Rate	0.90%	0.94%
9 Interest on BPA Fund/Investments	2,571	2,493
10		
11 Repayment Study Interest Income	1,225	2,874
12		
13 <b>Reserves not for Risk</b>		
14 SOY Cash Balance	126,832	126,832
15 EOY Cash Balance	126,832	126,832
16 Average Cash Balance	126,832	126,832
17 Interest Income	1,141	1,186
18		
19 Annual Interest Income	4,937	6,553

**Table 5C**  
**Interest Income from Projected Cash Balances**  
**Generation Revised Revenue Test**  
**(\$000s)**

	<b>A</b>	<b>B</b>
	<b><u>2020</u></b>	<b><u>2021</u></b>
1 Annual Cash Surplus/(Deficit)	35,222	(43,554)
2		
3 <b>Reserves for Risk</b>		
4 SOY Cash Balance	288,052	323,274
5 EOY Cash Balance	323,274	279,720
6 Average Cash Balance	305,663	301,497
7		
8 Interest Income Rate	0.90%	0.94%
9 Interest on BPA Fund/Investments	3,201	3,269
10		
11 Repayment Study Interest Income	1,225	2,874
12		
13 <b>Reserves not for Risk</b>		
14 SOY Cash Balance	126,832	126,832
15 EOY Cash Balance	126,832	126,832
16 Average Cash Balance	126,832	126,832
17 Interest Income	1,141	1,186
18		
19 Annual Interest Income	5,567	7,329

**Table 5D**

**Interest Earnings and Realized Gains/Losses on  
CGS Decommissioning Trust Fund  
(\$000s)**

	<b>A</b>	<b>B</b>
	<b>2020</b>	<b>2021</b>
1 Starting Fund Balance	389,435	393,535
2 Annual Cash Contributions	4,100	4,300
3 Ending Fund Balance	393,535	406,653
4		
5 Interest Earnings Rate	2.24%	2.24%
6 Earnings on Fund	8,818	9,112
7		
8 Gains/Losses Rate	1.28%	1.28%
9 Gains/Losses on Fund	5,052	5,220



## **6. INTEREST RATES FOR TREASURY SOURCES OF CAPITAL AND PRICE DEFLATORS**

### **6.1 Introduction**

Interest rates on bonds issued by BPA to Treasury and interest rates for Corps and Reclamation appropriations are used in development of repayment studies and projections of Federal interest expense in revenue requirements. Price deflators are used for developing spending levels in revenue requirements.

### **6.2 Source of Forecasts**

To project interest rates on bonds issued to Treasury, BPA uses Treasury yield curve forecasts provided by the Global Insights Group (GI). GI is also the source of price deflators that BPA treats as escalators for purposes of developing spending levels. GI develops the price deflators taking into account projections of Gross Domestic Product (GDP). The GDP consists of the sum of consumption, investment, government purchases and net exports, excluding transfers to foreigners.

### **6.3 Interest Rate Projections**

Projected interest rates for BPA bonds issued to Treasury are based on GI's yield curve projections of Treasury market rates, plus a markup of up depending on the length of time to maturity. The markup estimate reflects an interagency agreement that Treasury price BPA bonds at a level comparable to securities (bonds) issued by U.S. government corporations. The markup estimate reflects the average basis point markup on recent intermediate and long-term bonds issued by BPA.

Interest rates on projected capital investments funded by appropriations are also based on GI's projections of Treasury yield curves. The yield curves used for appropriations do not include the basis point markup.

### **6.4 Deflators**

The current and cumulative price deflator used to escalate midyear dollars are derived from the fiscal and calendar year price deflators provided by GI. They are calculated as follows:

$$[(FY_1/100) \times 0.5] + 1 = \text{Cumulative Price Deflator}_1$$

The fiscal year GDP price deflator for the current year is divided by one hundred and multiplied by one half. The result, when added to one, yields the cumulative price deflator for the first year.

$$[1 + (FY_t/100)] \times \text{Cumulative Price Deflator}_{t-1} = \text{Cumulative Price Deflator}_t, \text{ when } t > 1$$

The fiscal year GDP price deflator for a future year is divided by one hundred and added to one. The result, when multiplied by the cumulative price deflator from the previous year, yields the cumulative price deflator for the each successive year.

# memorandum

DATE: 12/31/2018

REPLY TO  
ATTN OF: FTR-2

SUBJECT: FY 2019 Interest Rate and Inflation Forecast

TO: See Attached "cc:" List

Please see the attached BPA interest rate and inflation forecast for the period FY 2019 through 2048.

These forecasts provide an internally consistent basis for BPA decisions regarding debt management, budget formulation, financial analyses, capital budgeting, and strategic planning efforts. The FY 2019 forecast consisted of the following tables:

- Table 1: 30 Year Borrowing Rate Comparison
- Table 2: 15 Year Borrowing Rate Comparison
- Table 3: 5 Year Borrowing Rate Comparison
- Table 4: Appropriations Borrowing Rates
- Table 5: BPA Agency Borrowing Rates
- Table 6: Third-Party Taxable Borrowing Rates
- Table 7: Third-Party Tax-Exempt Borrowing Rates
- Table 8: FERC (Bank Prime) Borrowing Rates and 3-Month London Interbank Offered (LIBOR) Borrowing Rates
- Table 9: Inflation Forecast and Comparison

## **Borrowing Rate Forecast Methodology**

A table of US Treasury interest rates for calendar years (CY) 2018-2048 is established using:

- an average of all available data for CY 2018 from Bloomberg's Bi550 US Treasury BVAL curve and
- the 2019-2048 projections from the Global Insight's (GI) third-quarter August 2018 Long-Term Economic Outlook.

This table is then converted to BPA fiscal years (FY) by combining 75% of the current year's CY rate and 25% of the previous year's CY rate. For example, the value for BPA FY 2020 consists of 75% CY 2020 and 25% of CY 2019.

BPA's borrowing rate projections, tables 4 through 7, reflect a spread compared to the Treasury yield curve. The spread is calculated from historical data, not including any call features, and is then applied to the BPA FY Treasury table.

The FERC and LIBOR rates, table 8, are established by using the CY projections from GI's third-quarter August 2018 Long-Term Economic Outlook and then converted into BPA FY.

## **Inflation Forecast Methodology**

BPA inflation assumptions reflect projected changes in the U.S. GDP Price Deflator. The GDP Price Deflator is the broadest measure of inflation in the U.S. economy. GDP reflects the value of all goods and services produced by domestic and foreign capital and labor within the United States. Major components of GDP include: total consumption, investment, government purchases, and net exports. The real GDP calculations reflect both the changing mix of the components in GDP and the relative price changes in these components.

This index assumes a base year of 2018. The projected change in the GDP price deflator and comparison with the FY 2018 inflation forecast is summarized in Table 9. Column A shows the projected trend in GDP inflation rates between 2019-2048 on a CY basis and in column B by BPA FY. Column C provides the cumulative price index projections. The forecast expresses FY dollar values as mid-year dollar values. Columns D and E show last year's projections while columns F and G show a comparison between the two years worth of projections.

If you have questions concerning the FY 2019 Interest Rate and Inflation Forecasts please contact Bill Hendricks at [wwhendricks@bpa.gov](mailto:wwhendricks@bpa.gov) or (503) 230-5389.



Bill Hendricks  
Financial Analyst  
Revenue Requirement, Repayment, and Financial Strategy

Official File:

<https://finance.bud.bpa.gov/FT/FTR/Common%20Agency%20Assumptions/Forms/AllItems.aspx>

Table 1

**30 Year Borrowing Rate Comparison**

FY 2019 Forecast of Appropriation, BPA Agency, Third-Part Taxable,  
and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2019-2048

<b>Year</b>	<b>A Appropriation Rate</b>	<b>B BPA Agency Rate</b>	<b>C Third-Party Taxable Rate</b>	<b>D Third-Party Tax-Exempt Rate</b>
<b>2019</b>	3.13	3.75	4.09	3.70
<b>2020</b>	3.44	4.02	4.37	3.94
<b>2021</b>	3.62	4.15	4.50	4.04
<b>2022</b>	3.74	4.22	4.58	4.08
<b>2023</b>	3.82	4.26	4.62	4.08
<b>2024</b>	3.82	4.26	4.62	4.08
<b>2025</b>	3.82	4.26	4.62	4.08
<b>2026</b>	3.82	4.26	4.62	4.08
<b>2027</b>	3.82	4.26	4.62	4.08
<b>2028</b>	3.82	4.26	4.62	4.08
<b>2029</b>	3.82	4.26	4.62	4.08
<b>2030</b>	3.82	4.26	4.62	4.08
<b>2031</b>	3.82	4.26	4.62	4.08
<b>2032</b>	3.82	4.26	4.62	4.08
<b>2033</b>	3.82	4.26	4.62	4.08
<b>2034</b>	3.82	4.26	4.62	4.08
<b>2035</b>	3.82	4.26	4.62	4.08
<b>2036</b>	3.82	4.26	4.62	4.08
<b>2037</b>	3.82	4.26	4.62	4.08
<b>2038</b>	3.82	4.26	4.62	4.08
<b>2039</b>	3.82	4.26	4.62	4.08
<b>2040</b>	3.82	4.26	4.62	4.08
<b>2041</b>	3.82	4.26	4.62	4.08
<b>2042</b>	3.82	4.26	4.62	4.08
<b>2043</b>	3.82	4.26	4.62	4.08
<b>2044</b>	3.82	4.26	4.62	4.08
<b>2045</b>	3.82	4.26	4.62	4.08
<b>2046</b>	3.82	4.26	4.62	4.08
<b>2047</b>	3.82	4.26	4.62	4.08
<b>2048</b>	3.82	4.26	4.62	4.08

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2019 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 2

**15 Year Borrowing Rate Comparison**

FY 2019 Forecast of Appropriation, BPA Agency, Third-Part Taxable,  
and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2019-2048

<b>Year</b>	<b>A Appropriation Rate</b>	<b>B BPA Agency Rate</b>	<b>C Third-Party Taxable Rate</b>	<b>D Third-Party Tax-Exempt Rate</b>
<b>2019</b>	3.00	3.56	3.84	3.17
<b>2020</b>	3.17	3.82	4.11	3.44
<b>2021</b>	3.34	3.91	4.21	3.53
<b>2022</b>	3.45	3.93	4.24	3.56
<b>2023</b>	3.56	3.95	4.27	3.58
<b>2024</b>	3.56	3.95	4.27	3.58
<b>2025</b>	3.56	3.95	4.27	3.58
<b>2026</b>	3.56	3.95	4.27	3.58
<b>2027</b>	3.56	3.95	4.27	3.58
<b>2028</b>	3.56	3.95	4.27	3.58
<b>2029</b>	3.56	3.95	4.27	3.58
<b>2030</b>	3.56	3.95	4.27	3.58
<b>2031</b>	3.56	3.95	4.27	3.58
<b>2032</b>	3.56	3.95	4.27	3.58
<b>2033</b>	3.56	3.95	4.27	3.58
<b>2034</b>	3.56	3.95	4.27	3.58
<b>2035</b>	3.56	3.95	4.27	3.58
<b>2036</b>	3.56	3.95	4.27	3.58
<b>2037</b>	3.56	3.95	4.27	3.58
<b>2038</b>	3.56	3.95	4.27	3.58
<b>2039</b>	3.56	3.95	4.27	3.58
<b>2040</b>	3.56	3.95	4.27	3.58
<b>2041</b>	3.56	3.95	4.27	3.58
<b>2042</b>	3.56	3.95	4.27	3.58
<b>2043</b>	3.56	3.95	4.27	3.58
<b>2044</b>	3.56	3.95	4.27	3.58
<b>2045</b>	3.56	3.95	4.27	3.58
<b>2046</b>	3.56	3.95	4.27	3.58
<b>2047</b>	3.56	3.95	4.27	3.58
<b>2048</b>	3.56	3.95	4.27	3.58

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2019 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 3  
**5 Year Borrowing Rate Comparison**  
 FY 2019 Forecast of Appropriation, BPA Agency, Third-Part Taxable,  
 and Third-Party Tax-Exempt Borrowing Rates

BPA Fiscal Years 2019-2048

Year	A Appropriation Rate	B BPA Agency Rate	C Third-Party Taxable Rate	D Third-Party Tax-Exempt Rate
<b>2019</b>	2.88	3.28	3.59	2.60
<b>2020</b>	2.96	3.58	3.90	2.93
<b>2021</b>	3.16	3.64	3.98	3.03
<b>2022</b>	3.25	3.61	3.95	3.02
<b>2023</b>	3.38	3.61	3.96	3.05
<b>2024</b>	3.38	3.61	3.96	3.05
<b>2025</b>	3.38	3.61	3.96	3.05
<b>2026</b>	3.38	3.61	3.96	3.05
<b>2027</b>	3.38	3.61	3.96	3.05
<b>2028</b>	3.38	3.61	3.96	3.05
<b>2029</b>	3.38	3.61	3.96	3.05
<b>2030</b>	3.38	3.61	3.96	3.05
<b>2031</b>	3.38	3.61	3.96	3.05
<b>2032</b>	3.38	3.61	3.96	3.05
<b>2033</b>	3.38	3.61	3.96	3.05
<b>2034</b>	3.38	3.61	3.96	3.05
<b>2035</b>	3.38	3.61	3.96	3.05
<b>2036</b>	3.38	3.61	3.96	3.05
<b>2037</b>	3.38	3.61	3.96	3.05
<b>2038</b>	3.38	3.61	3.96	3.05
<b>2039</b>	3.38	3.61	3.96	3.05
<b>2040</b>	3.38	3.61	3.96	3.05
<b>2041</b>	3.38	3.61	3.96	3.05
<b>2042</b>	3.38	3.61	3.96	3.05
<b>2043</b>	3.38	3.61	3.96	3.05
<b>2044</b>	3.38	3.61	3.96	3.05
<b>2045</b>	3.38	3.61	3.96	3.05
<b>2046</b>	3.38	3.61	3.96	3.05
<b>2047</b>	3.38	3.61	3.96	3.05
<b>2048</b>	3.38	3.61	3.96	3.05

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2019 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 4  
**Appropriations Borrowing Rates**

BPA Fiscal Years 2019-2048  
 (continued on next page)

Year	Maturity														
	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2019	2.64	2.75	2.75	2.83	2.88	2.88	2.88	2.88	2.95	3.00	3.00	3.00	3.00	3.00	3.00
2020	3.02	2.97	2.96	2.96	2.96	2.98	3.01	3.03	3.06	3.08	3.10	3.12	3.13	3.15	3.17
2021	3.29	3.24	3.21	3.18	3.16	3.17	3.19	3.21	3.23	3.25	3.27	3.29	3.31	3.32	3.34
2022	3.38	3.34	3.31	3.28	3.25	3.27	3.29	3.32	3.34	3.36	3.38	3.40	3.42	3.44	3.45
2023	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2024	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2025	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2026	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2027	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2028	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2029	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2030	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2031	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2032	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2033	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2034	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2035	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2036	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2037	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2038	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2039	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2040	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2041	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2042	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2043	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2044	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2045	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2046	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2047	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56
2048	3.49	3.47	3.44	3.41	3.38	3.39	3.41	3.43	3.45	3.47	3.49	3.50	3.52	3.54	3.56

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2019 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.

Table 4  
**Appropriations Borrowing Rates**

BPA Fiscal Years 2019-2048

Maturity																
16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.10	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	<b>2019</b>
3.19	3.21	3.22	3.24	3.26	3.28	3.30	3.31	3.33	3.35	3.37	3.39	3.40	3.42	3.44	3.44	<b>2020</b>
3.36	3.38	3.40	3.42	3.43	3.45	3.47	3.49	3.51	3.53	3.54	3.56	3.58	3.60	3.62	3.62	<b>2021</b>
3.47	3.49	3.51	3.53	3.55	3.57	3.59	3.60	3.62	3.64	3.66	3.68	3.70	3.72	3.74	3.74	<b>2022</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2023</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2024</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2025</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2026</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2027</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2028</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2029</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2030</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2031</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2032</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2033</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2034</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2035</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2036</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2037</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2038</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2039</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2040</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2041</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2042</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2043</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2044</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2045</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2046</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2047</b>
3.57	3.59	3.61	3.63	3.64	3.66	3.68	3.70	3.71	3.73	3.75	3.76	3.78	3.80	3.82	3.82	<b>2048</b>

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

2/ FY 2019 Appropriation rates are determined in accordance with BPA Appropriations Refinancing Act, 16 U.S.C. 8381 enacted on April 26, 1996, and are independent of the Global Insight Treasury Yield forecasts.



Table 5  
**BPA Agency Borrowing Rates**

BPA Fiscal Years 2019-2048  
 (continued on next page)

Year	Maturity															
	6 Month	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2019	2.94	3.05	3.19	3.22	3.25	3.28	3.32	3.37	3.41	3.45	3.50	3.51	3.52	3.53	3.55	3.56
2020	3.59	3.60	3.64	3.62	3.60	3.58	3.61	3.65	3.68	3.72	3.75	3.76	3.78	3.79	3.80	3.82
2021	3.76	3.74	3.77	3.73	3.69	3.64	3.68	3.72	3.75	3.79	3.82	3.84	3.86	3.87	3.89	3.91
2022	3.74	3.71	3.72	3.69	3.65	3.61	3.66	3.70	3.75	3.79	3.84	3.86	3.88	3.89	3.91	3.93
2023	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2024	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2025	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2026	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2027	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2028	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2029	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2030	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2031	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2032	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2033	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2034	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2035	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2036	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2037	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2038	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2039	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2040	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2041	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2042	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2043	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2044	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2045	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2046	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2047	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95
2048	3.73	3.69	3.72	3.68	3.64	3.61	3.66	3.70	3.75	3.80	3.85	3.87	3.89	3.91	3.93	3.95

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 5  
**BPA Agency Borrowing Rates**

BPA Fiscal Years 2019-2048

**Maturity**

16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
3.57	3.58	3.60	3.61	3.62	3.63	3.65	3.66	3.67	3.68	3.70	3.71	3.72	3.74	3.75	3.75	<b>2019</b>
3.83	3.84	3.86	3.87	3.89	3.90	3.91	3.93	3.94	3.95	3.97	3.98	3.99	4.01	4.02	4.02	<b>2020</b>
3.92	3.94	3.95	3.97	3.99	4.00	4.02	4.04	4.05	4.07	4.08	4.10	4.12	4.13	4.15	4.15	<b>2021</b>
3.95	3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.14	4.16	4.18	4.20	4.22	4.22	<b>2022</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2023</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2024</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2025</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2026</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2027</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2028</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2029</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2030</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2031</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2032</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2033</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2034</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2035</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2036</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2037</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2038</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2039</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2040</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2041</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2042</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2043</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2044</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2045</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2046</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2047</b>
3.97	3.99	4.01	4.03	4.05	4.07	4.09	4.11	4.13	4.15	4.18	4.20	4.22	4.24	4.26	4.26	<b>2048</b>

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 6  
**Third-Party Taxable Borrowing Rates**

BPA Fiscal Years 2019-2048  
 (continued on next page)

Year	Maturity														
	1 Year	2 Year	3 Year	4 Year	5 Year	6 Year	7 Year	8 Year	9 Year	10 Year	11 Year	12 Year	13 Year	14 Year	15 Year
2019	3.28	3.45	3.50	3.55	3.59	3.63	3.66	3.69	3.72	3.75	3.77	3.79	3.80	3.82	3.84
2020	3.85	3.91	3.91	3.90	3.90	3.92	3.95	3.97	4.00	4.02	4.04	4.06	4.07	4.09	4.11
2021	4.02	4.05	4.03	4.00	3.98	4.00	4.03	4.05	4.08	4.11	4.13	4.15	4.17	4.19	4.21
2022	4.01	4.02	4.00	3.98	3.95	3.99	4.02	4.06	4.10	4.13	4.15	4.18	4.20	4.22	4.24
2023	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2024	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2025	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2026	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2027	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2028	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2029	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2030	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2031	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2032	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2033	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2034	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2035	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2036	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2037	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2038	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2039	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2040	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2041	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2042	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2043	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2044	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2045	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2046	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2047	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27
2048	4.02	4.02	4.00	3.98	3.96	4.00	4.04	4.08	4.12	4.16	4.18	4.20	4.23	4.25	4.27

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 6  
**Third-Party Taxable Borrowing Rates**

BPA Fiscal Years 2019-2048

**Maturity**

16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
3.85	3.87	3.89	3.91	3.92	3.94	3.96	3.97	3.99	4.01	4.02	4.04	4.06	4.08	4.09	4.09	<b>2019</b>
4.12	4.14	4.16	4.18	4.19	4.21	4.23	4.25	4.26	4.28	4.30	4.32	4.33	4.35	4.37	4.37	<b>2020</b>
4.23	4.24	4.26	4.28	4.30	4.32	4.34	4.36	4.38	4.40	4.42	4.44	4.46	4.48	4.50	4.50	<b>2021</b>
4.27	4.29	4.31	4.33	4.35	4.38	4.40	4.42	4.44	4.47	4.49	4.51	4.53	4.55	4.58	4.58	<b>2022</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2023</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2024</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2025</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2026</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2027</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2028</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2029</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2030</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2031</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2032</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2033</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2034</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2035</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2036</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2037</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2038</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2039</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2040</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2041</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2042</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2043</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2044</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2045</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2046</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2047</b>
4.29	4.32	4.34	4.36	4.39	4.41	4.43	4.45	4.48	4.50	4.52	4.55	4.57	4.59	4.62	4.62	<b>2048</b>

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 7  
**Third-Party Tax-Exempt Borrowing Rates**

BPA Fiscal Years 2019-2048  
 (continued on next page)

<b>Maturity</b>															
<b>Year</b>	<b>1 Year</b>	<b>2 Year</b>	<b>3 Year</b>	<b>4 Year</b>	<b>5 Year</b>	<b>6 Year</b>	<b>7 Year</b>	<b>8 Year</b>	<b>9 Year</b>	<b>10 Year</b>	<b>11 Year</b>	<b>12 Year</b>	<b>13 Year</b>	<b>14 Year</b>	<b>15 Year</b>
2019	2.46	2.49	2.53	2.56	2.60	2.68	2.76	2.84	2.92	3.00	3.03	3.07	3.10	3.14	3.17
2020	3.07	3.00	2.97	2.95	2.93	3.00	3.06	3.13	3.20	3.27	3.30	3.33	3.37	3.40	3.44
2021	3.27	3.18	3.13	3.08	3.03	3.09	3.16	3.22	3.29	3.36	3.39	3.42	3.46	3.49	3.53
2022	3.29	3.19	3.13	3.08	3.02	3.10	3.17	3.24	3.31	3.38	3.42	3.45	3.49	3.52	3.56
2023	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2024	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2025	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2026	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2027	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2028	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2029	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2030	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2031	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2032	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2033	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2034	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2035	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2036	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2037	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2038	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2039	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2040	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2041	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2042	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2043	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2044	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2045	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2046	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2047	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58
2048	3.34	3.23	3.17	3.11	3.05	3.12	3.20	3.27	3.34	3.41	3.45	3.48	3.51	3.55	3.58

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 7  
**Third-Party Tax-Exempt Borrowing Rates**

BPA Fiscal Years 2019-2048

**Maturity**

16 Year	17 Year	18 Year	19 Year	20 Year	21 Year	22 Year	23 Year	24 Year	25 Year	26 Year	27 Year	28 Year	29 Year	30 Year	50 Year	Year
3.21	3.24	3.28	3.31	3.35	3.38	3.42	3.46	3.49	3.53	3.56	3.60	3.63	3.67	3.70	3.70	<b>2019</b>
3.47	3.50	3.54	3.57	3.60	3.64	3.67	3.71	3.74	3.77	3.81	3.84	3.88	3.91	3.94	3.94	<b>2020</b>
3.56	3.60	3.63	3.66	3.70	3.73	3.77	3.80	3.84	3.87	3.90	3.94	3.97	4.01	4.04	4.04	<b>2021</b>
3.59	3.63	3.66	3.70	3.73	3.77	3.80	3.84	3.87	3.91	3.94	3.98	4.01	4.05	4.08	4.08	<b>2022</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2023</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2024</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2025</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2026</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2027</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2028</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2029</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2030</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2031</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2032</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2033</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2034</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2035</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2036</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2037</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2038</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2039</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2040</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2041</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2042</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2043</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2044</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2045</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2046</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2047</b>
3.61	3.65	3.68	3.71	3.75	3.78	3.82	3.85	3.88	3.92	3.95	3.98	4.02	4.05	4.08	4.08	<b>2048</b>

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 8  
**FERC (Bank Prime) and 3-Month LIBOR Borrowing Rates**

BPA Fiscal Years 2019-2048

Year	A FERC Rate	B 3-Month LIBOR Rate
2019	5.65	2.92
2020	6.31	3.42
2021	6.49	3.56
2022	6.50	3.57
2023	6.40	3.48
2024	6.18	3.27
2025	6.03	3.12
2026	5.90	2.99
2027	5.77	2.86
2028	5.75	2.83
2029	5.75	2.83
2030	5.75	2.83
2031	5.75	2.83
2032	5.75	2.83
2033	5.75	2.83
2034	5.75	2.83
2035	5.75	2.83
2036	5.75	2.83
2037	5.75	2.83
2038	5.75	2.83
2039	5.75	2.83
2040	5.75	2.83
2041	5.75	2.83
2042	5.75	2.83
2043	5.75	2.83
2044	5.75	2.83
2045	5.75	2.83
2046	5.75	2.83
2047	5.75	2.83
2048	5.75	2.83

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).

Table 9  
**Inflation Forecast and Comparison**  
 Calendar/Fiscal Year Forecasts 2019 vs. 2018

Calendar/Fiscal Years 2019-2048

YEAR	A	B	C	D	E	F	G
	2019 Calendar Year GDP Price Deflator (%)	2019 Fiscal Year GDP Price Deflator (%)	2019 Fiscal Year Cumulative Price Deflator (Base Year 2018)	2018 Fiscal Year GDP Price Deflator (%)	2018 Fiscal Year Cumulative Price Deflator (Base Year 2018)	Change in the GDP Price Deflator (B-D)	Change in the Cumulative Price Deflator (C-E)
2019	2.34%	2.33%	1.012	2.20%	1.022	0.14%	-0.010
2020	2.48%	2.45%	1.036	2.28%	1.045	0.17%	-0.009
2021	2.47%	2.47%	1.062	2.26%	1.069	0.21%	-0.007
2022	2.39%	2.41%	1.088	2.22%	1.093	0.18%	-0.005
2023	2.33%	2.34%	1.113	2.23%	1.117	0.11%	-0.004
2024	2.27%	2.28%	1.138	2.22%	1.142	0.06%	-0.003
2025	2.20%	2.21%	1.164	2.20%	1.167	0.02%	-0.003
2026	2.17%	2.17%	1.189	2.15%	1.192	0.02%	-0.003
2027	2.22%	2.21%	1.215	2.10%	1.217	0.10%	-0.002
2028	2.25%	2.24%	1.242	2.03%	1.242	0.22%	0.001
2029	2.26%	2.26%	1.270	2.00%	1.267	0.26%	0.004
2030	2.31%	2.29%	1.300	2.01%	1.292	0.28%	0.008
2031	2.32%	2.32%	1.330	2.01%	1.318	0.31%	0.012
2032	2.33%	2.33%	1.361	2.01%	1.345	0.31%	0.016
2033	2.34%	2.34%	1.393	2.02%	1.372	0.32%	0.021
2034	2.35%	2.35%	1.425	2.04%	1.400	0.30%	0.025
2035	2.34%	2.34%	1.459	2.06%	1.429	0.28%	0.030
2036	2.34%	2.34%	1.493	2.07%	1.458	0.27%	0.035
2037	2.37%	2.36%	1.528	2.07%	1.488	0.30%	0.040
2038	2.38%	2.38%	1.564	2.06%	1.519	0.32%	0.045
2039	2.38%	2.38%	1.602	2.05%	1.550	0.33%	0.051
2040	2.38%	2.38%	1.640	2.06%	1.582	0.32%	0.058
2041	2.39%	2.39%	1.679	2.07%	1.615	0.32%	0.064
2042	2.41%	2.41%	1.719	2.08%	1.648	0.33%	0.071
2043	2.42%	2.42%	1.761	2.10%	1.683	0.32%	0.078
2044	2.42%	2.42%	1.803	2.11%	1.719	0.30%	0.085
2045	2.40%	2.41%	1.847	2.12%	1.755	0.28%	0.092
2046	2.40%	2.40%	1.891	2.12%	1.792	0.28%	0.099
2047	2.41%	2.41%	1.937	2.11%	1.830	0.30%	0.107
2048	2.41%	2.41%	1.983				

1/ All values represent a Bonneville Fiscal Year (October 1 - September 30).  
 Except for Column A which represents a standard Calendar Year.

2/ Fiscal Year Cumulative Price Deflator escalates to midyear dollars. The first year, 2019, is determined as follows:  $1.012 = (.0233 \cdot 5) + 1$ .  
 An example of subsequent year cumulative growth, such as in 2020, is found as:  $1.036 = (1 + .0245)^1 \cdot 1.012$



## **7. PROJECTED BONDS ISSUED TO TREASURY**

### **7.1 Introduction**

This chapter documents all the bonds that BPA has issued and those it projects it will issue to the U.S. Treasury to finance BPA capital investments and Reclamation/Corps investments that will be direct-funded by BPA.

### **7.2 Issuing Bonds**

BPA primarily funds capital outlays by issuing new long-term debt in the form of bonds issued to the U.S. Treasury. BPA issues four types of bonds for Power Services: Construction, Conservation Fish and Wildlife/Environment, and Reclamation/Corps direct-funded. Construction bonds included in the generation study are the portions of bonds that fund furniture, information technology (IT) hardware and software for PS. (Construction bonds are also issued to fund capital expenditures of the transmission function including IT hardware and software and furniture.) Conservation bonds are used to fund investments in energy efficiency projects. No new conservation bonds have been issued since FY 2015. Fish and Wildlife bonds are issued to fund the capital portion of BPA's Fish and Wildlife program. Environment bonds are issued to fund work done by the Transmission Business Line and are not included in the generation repayment study. BPA also issues bonds to fund Reclamation/Corps generation efficiency and reliability improvements. All bonds projected for issuance have been entered into the generation repayment study.

BPA no longer issues conservation bonds to fund the capital portion of BPA's conservation program. Instead, the program is treated as a current year expense.

Reclamation/Corps direct funding bonds have a maximum maturity of 30 years although they may be issued for shorter durations or refinanced up to a maximum maturity of 45 years. Construction bonds are given a maximum repayment period of 6 years. Conservation bonds, issued through FY 2015, have a maximum maturity of 12 years. Fish and Wildlife bonds have a maximum maturity of 15 years.

New bonds are based on projected BPA and Reclamation/Corps capital program outlays. Maturities reflect decisions about debt placement. The assignment practices for interest rates are discussed in Chapter 2 of the Study. The interest rates used are in Chapter 6 of this document.

Projected bonds reflect a borrowing plan that incorporates timing differences between capital spending and the actual borrowing. BPA does not typically issue new bonds every month to finance capital spending. Instead, it uses current reserves and replenishes reserves as needed. The amount yet to be borrowed is classified as "deferred borrowing." As a result, the amount borrowed in any year can vary significantly from the actual capital spending in that year. For the purposes of the repayment modeling, all deferred borrowing is assumed to be reduced to zero by the end of the rate period.

Table 7A

**BPA Projected Generation Treasury Borrowing  
FY 2019 - 2021  
(\$000s)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b><u>FY</u></b>	<b><u>Description</u></b>	<b><u>Interest Rate</u></b>	<b><u>Term</u></b>	<b><u>Total Borrowing</u></b>
1 <b>2019</b>	<b>TOTAL</b>			<b>0</b>
2				
3 <b>2020</b>	Bureau of Reclamation	3.59%	30	40,000
4	Bureau of Reclamation	3.59%	30	40,000
5	Bureau of Reclamation	3.59%	30	42,000
6	Corps of Engineers	3.59%	0.2	33,900
7	Corps of Engineers	3.59%	30	9,100
8	Corps of Engineers	3.59%	30	43,000
9	Corps of Engineers	3.59%	30	45,000
10	Power Agency Services	3.59%	5	6,000
11	Fish and Wildlife	3.59%	15	47,000
12	Technology	3.59%	5	<u>4,000</u>
13	<b>TOTAL</b>			<b>310,000</b>
14				
15 <b>2021</b>	Bureau of Reclamation	3.76%	0.2	62,000
16	Bureau of Reclamation	3.76%	0.1	62,000
17	Bureau of Reclamation	4.00%	21	65,000
18	Corps of Engineers	3.76%	0.2	121,000
19	Corps of Engineers	3.76%	0.2	11,000
20	Corps of Engineers	3.76%	0.1	104,000
21	Corps of Engineers	4.15%	30	28,000
22	Corps of Engineers	4.15%	30	138,000
23	Power Agency Services	3.68%	6	18,000
24	Fish and Wildlife	3.91%	15	129,000
25	Technology	3.74%	1	<u>26,000</u>
26	<b>TOTAL</b>			<b>764,000</b>

**Table 7B**

**BPA Projected Generation Appropriations  
FY 2019 - 2021  
(\$000s)**

<u>FY</u>	<u>A</u> <u>Description</u>	<u>B</u> <u>Interest</u> <u>Rate</u>	<u>C</u> <u>Term</u>	<u>D</u> <u>Total</u> <u>Borrowing</u>
2 <b>2019</b>	Columbia River Fish Mitigation	3.13%	50	87,381
3 <b>2020</b>	Columbia River Fish Mitigation	3.44%	50	35,551
4 <b>2021</b>	Columbia River Fish Mitigation	3.62%	50	<u>57,057</u>
5	<b>TOTAL</b>			<b>179,989</b>

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## **8. NON-FEDERAL DEBT SERVICE**

### **8.1 Introduction**

This chapter documents the data on third-party debt service or payment costs associated with capitalized contracts and other long-term, fixed contractual obligations. This chapter does not include replacements for the Columbia Generating Station (CGS). This information is included in Chapter 10 of this document.

### **8.2 Methodology**

To determine debt service streams for EN Nuclear Projects WNP-1, CGS, and WNP-3, BPA uses a commercial municipal bond debt management model, DBC Debt Manager. All base debt service streams shown in Table 8A are based on the amount of non-Federal debt outstanding shown in BPA fiscal year values, as it will be reflected in BPA financial statements. Table 8B shows the principal payments in the bond holder's fiscal year which is used in the debt to asset ratio calculations. The debt service streams reflect all EN refinancings to date and projected CGS capital investments. CGS debt service is displayed net of anticipated revenues expected from the Tennessee Valley Authority for the purchase of nuclear fuel from EN. Debt service streams are derived from such sources as Official Statements, Agency agreements, Agency contracts, and budgetary data.

**Table 8A**  
**Non-Federal Debt Service -- BPA Fiscal Year**  
(\$000s)

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>
<b>Interest</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>
1 WNP-1	39,369	39,346	39,612	39,957	39,957	39,957	37,130	25,829	15,655	6,876	634
2 CGS	153,981	151,632	145,163	137,665	122,847	108,497	96,680	96,060	95,372	94,197	90,967
3 CGS Adjustments	(4,387)	(4,331)	(4,102)	(3,859)	(3,484)	(2,201)	-	-	-	-	-
4 CGS Expenses	179	176	175	173	172	128	-	-	-	-	-
6 CGS Total	149,773	147,477	141,235	133,980	119,535	106,423	96,680	96,060	95,372	94,197	90,967
7 WNP-3	45,290	45,270	45,573	45,913	45,108	41,862	38,027	31,351	22,639	12,371	725
8 Wasco	447	410	355	279	195	108	16	-	-	-	-
9 Cowlitz	3,654	3,471	3,280	3,079	2,868	2,646	2,402	2,145	1,874	1,589	1,289
10 Total	238,533	230,055	223,207	207,663	190,996	174,256	155,384	135,540	115,034	93,616	87,721
<b>Principal</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>
11 WNP-1	1,226	-	-	-	59,241	230,586	203,314	175,515	124,009	297	1,188
12 CGS	333,348	96,473	131,501	288,719	229,646	17,569	18,969	27,044	65,708	119,085	223,973
15 TVA Revenue Offset	(178,250)	(189,500)	(72,500)	(81,000)	(49,500)	-	-	-	-	-	-
16 CGS Total	155,098	(93,028)	59,001	207,719	180,146	17,569	18,969	27,044	65,708	119,085	223,973
17 WNP-3	1,150	1,785	17,069	67,029	77,578	134,178	174,965	207,393	231,375	340	1,358
18 Wasco	1,527	1,593	1,671	1,751	1,840	315	-	-	-	-	-
19 Cowlitz	3,830	4,020	4,220	4,435	4,655	4,900	5,155	5,430	5,710	6,010	6,330
20 Total	162,831	(85,629)	81,961	280,934	323,460	387,548	402,403	415,381	426,801	125,732	232,849

**Table 8B**  
**Non-Federal Principal-- Bond Holder Fiscal Year**  
**(\$000s)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>
1 WNP-1	1,635	-	-	-	-	236,965	211,450	178,905	165,345	-	1,188
2 CGS	334,855	101,825	80,415	284,760	300,595	16,800	19,875	16,250	59,425	84,555	222,676
5 WNP-3	740	2,380	-	68,275	63,290	120,440	175,390	173,690	308,500	-	1,358
6 Wasco	1,490	1,535	1,605	1,685	1,765	1,855	-	-	-	-	-
7 Cowlitz	<u>3,650</u>	<u>3,830</u>	<u>4,020</u>	<u>4,220</u>	<u>4,435</u>	<u>4,655</u>	<u>4,900</u>	<u>5,155</u>	<u>5,430</u>	<u>5,710</u>	<u>6,010</u>
8 Total	342,370	109,570	86,040	358,940	370,085	380,715	411,615	374,000	538,700	90,265	231,233

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## **9. IRRIGATION ASSISTANCE**

### **9.1 Introduction**

This chapter documents the irrigation construction costs for Federal reclamation projects in the Pacific Northwest that the FCRPS has an obligation to repay. These payments, known as irrigation assistance, have been included in the repayment study.

### **9.2 Background**

In an effort to encourage settlement of the arid and semiarid lands of the Western United States, the 1902 Reclamation Act created the Reclamation to develop water resources for irrigation. The 1902 Reclamation Act provided that irrigators using the reclamation projects had 10 years to repay the construction costs of such projects. Title to the reclamation projects, however, remained with the Federal government even after all construction costs were repaid.

By the 1920s, a 10-year repayment period for irrigators was determined to be economically unrealistic. After several leniency acts and extensions, Congress passed the 1939 Reclamation Act, which changed the repayment period on reclamation projects to 40 years after a 10-year development period. Later revisions and project-specific legislation extended repayment periods for most reclamation projects to 50 years after a 10-year development period. However, the Kennewick project has a 66-year repayment period.

Originally, irrigators were responsible for repaying all project construction costs without interest. However, hydropower is a by-product of many reclamation projects and not all of the power generated is needed for irrigation works. As early as the Town Sites and Power Development Act (April 16, 1906, ch. 1631, 34 Stat. 116) Congress authorized Reclamation to lease surplus power and use the proceeds to repay part of the costs of the reclamation projects.

The concept of power revenues contributing to the repayment of Reclamation's multipurpose projects evolved to the current policy, in which power revenues are used to repay that portion of the project construction costs allocated to irrigation use that are beyond the irrigators' "ability to repay." Moreover, the costs to be repaid by power revenues, known as irrigation assistance, are to be repaid without interest. Reclamation has the responsibility to make the determination of the amount that is beyond the irrigators' "ability to repay" through a farm budget analysis. The results of this analysis are used to establish the irrigators' repayment responsibility. The irrigators, as an irrigation district, and Reclamation formalize this repayment responsibility in irrigation contracts.

### **9.3 Irrigation Repayment**

In the Pacific Northwest, the Third Powerplant, Grand Coulee Dam legislation, P.L. 89-448, authorized repayment of the irrigation assistance costs from net revenues of the entire FCRPS. There are, however, limitations on the FCRPS's repayment responsibility. These limitations were added in amendment to the Third Powerplant, Grand Coulee Dam legislation, P.L. 89-561, and apply to reclamation projects, including projects not previously receiving similar assistance, which are authorized to receive such assistance, for which construction was authorized after September 7, 1966.

The irrigation assistance for such projects is to be paid only from net revenues of the power system. Net revenues are defined as those revenues over and above the amount needed to recover all costs allocated to power, including the cost of acquiring power by purchase or exchange, and previously authorized irrigation assistance. The construction of such projects shall be scheduled so that the repayment of the irrigation assistance associated with such projects from power revenues will not require an increase in BPA's power rates.

The total of all irrigation assistance to be repaid from power revenues shall not average more than \$30 million per year in any period of 20 consecutive years.

Reclamation provides BPA with the irrigation assistance to be repaid from each reclamation project. The current generation repayment study includes information provided in July 2008. Because irrigation assistance costs are repaid without interest and BPA repays highest interest-bearing investment first, irrigation assistance is generally scheduled to be repaid in the last year of the repayment period for each reclamation project.

**Table 9A  
Irrigation Assistance by Project  
(\$000s)**

	A	B	C
	Fiscal Year Due	Project	Amount
			Total
1	<b>2019</b>	Columbia Basin	50,764
2		Foster Creek	1,114
3		Michaud Flats	2,081
4		Michaud-Fort Hall	2,081
5		Yakima, Roza	564
6	<b>2019 Total:</b>		<b>56,604</b>
7	<b>2020</b>	Columbia Basin	21,951
8		Crooked River	2,380
9	<b>2020 Total:</b>		<b>24,331</b>
10	<b>2021</b>	Columbia Basin	12,660
11		Yakima, Roza	2,087
12	<b>2021 Total:</b>		<b>14,747</b>
13	<b>2022</b>	Columbia Basin	15,437
14		Yakima, Roza	623
15	<b>2022 Total:</b>		<b>16,060</b>
16	<b>2023</b>	Columbia Basin	9,761
17		Rogue River	3,091
18	<b>2023 Total:</b>		<b>12,852</b>
19	<b>2024</b>	Columbia Basin	7,782
20		Greater Wenatchee	1,961
21		Yakima, Kennewick	5,368
22	<b>2024 Total:</b>		<b>15,111</b>
23	<b>2025</b>	Columbia Basin	12,428
24		Crooked River Ext	1,122
25	<b>2025 Total:</b>		<b>13,550</b>
26	<b>2026</b>	Whitestone Coulee Unit	3,810
27		Columbia Basin	12,891
28		Greater Wenatchee	930
29		Yakima, Roza	3,144
30	<b>2026 Total:</b>		<b>20,774</b>
31	<b>2027</b>	Columbia Basin	3,927
32		Rogue River	2,194
33	<b>2027 Total:</b>		<b>6,121</b>
34	<b>2028</b>	Columbia Basin	6,987
35		The Dalles	4,204
36	<b>2028 Total:</b>		<b>11,191</b>
37	<b>2029</b>	Baker	4,065
38	<b>2029 Total:</b>		<b>4,065</b>
39	<b>2030</b>	East Greenacres-Rathdrum	1,996
40	<b>2030 Total:</b>		<b>1,996</b>
41	<b>2031</b>	Columbia Basin	10,530
42	<b>2031 Total:</b>		<b>10,530</b>

**Table 9A  
Irrigation Assistance by Project  
(\$000s)**

	A	B	C
	Fiscal Year Due	Project	Amount
			Total
43	<b>2033</b>	Rogue River	4,347
44	<b>2033 Total:</b>		<b>4,347</b>
45	<b>2035</b>	Columbia Basin	7,766
46	<b>2035 Total:</b>		<b>7,766</b>
47	<b>2036</b>	Whitestone Coulee Unit	3,660
48		Manson Unit	16,163
49		Tualatin	9,098
50	<b>2036 Total:</b>		<b>28,920</b>
51	<b>2037</b>	East Greenacres-Rathdrum	3,636
52		Columbia Basin	12,074
53	<b>2037 Total:</b>		<b>15,710</b>
54	<b>2039</b>	Tualatin	14,069
55	<b>2039 Total:</b>		<b>14,069</b>
56	<b>2042</b>	Oroville Tonasket	73,659
57	<b>2042 Total:</b>		<b>73,659</b>
58	<b>2045</b>	Columbia Basin	11,586
59	<b>2045 Total:</b>		<b>11,586</b>
60			
61	<b>Grand Total:</b>		<b>363,988</b>

Note: Assistance for Lower Teton, \$40,273, is not included in this list, as it was never completed. Therefore the Administrator has no obligation to recover the cost.

## **10. REPLACEMENTS PROJECTED AFTER THE COST EVALUATION PERIOD**

### **10.1 Introduction**

This chapter documents the process used to develop the capital investments necessary to maintain the existing Federal generating projects at their current operating level during the repayment period. This chapter also includes replacement costs for CGS. Replacement forecasts are included in repayment studies as required by RA 6120.2.

### **10.2 Methodology**

The repayment study incorporates a schedule of Federal investment with the replacements that are expected to occur over the repayment period for existing generation projects. This schedule, expressed in mid-year dollars for each repayment study, FY 2020 and 2021, is based on the amount of investment in the generating projects for the Corps and Reclamation through the end of the cost evaluation period.

Replacements are based on data provided by BPA's Federal Hydro Projects group, the organization responsible for managing the capital program that funds Corps and Reclamation powerhouse replacements. They prepare a project-by-project analysis of future funding requirements extending far into the future.

A schedule of replacement investments for CGS is based on the original investment adjusted by the use of the Handy-Whitman indices for a nuclear power plant. The Handy-Whitman Index is widely used in industry for estimating replacement costs for plant. The result of this calculation was converted into a mortgage-style investment with payments sufficient to retire the replacement cost in 37 years.

**Table 10A**  
**Corps/Reclamation Replacements (FY 2016)**  
**(\$000s)**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
	<b>In Service Date</b>	<b>Due Date</b>	<b>Current Principal</b>	<b>Interest Rate</b>
1	2021	2066	197,900	4.020%
2	2022	2067	197,900	4.020%
3	2023	2068	197,900	4.020%
4	2024	2069	197,900	4.020%
5	2025	2070	197,900	4.020%
6	2026	2071	197,900	4.020%
7	2027	2072	197,900	4.020%
8	2028	2073	197,900	4.020%
9	2029	2074	197,900	4.020%
10	2030	2075	197,900	4.020%
11	2031	2076	197,900	4.020%
12	2032	2077	197,900	4.020%
13	2033	2078	197,900	4.020%
14	2034	2079	197,900	4.020%
15	2035	2080	197,900	4.020%
16	2036	2081	197,900	4.020%
17	2037	2082	197,900	4.020%
18	2038	2083	197,900	4.020%
19	2039	2084	197,900	4.020%
20	2040	2085	197,900	4.020%
21	2041	2086	197,900	4.020%
22	2042	2087	197,900	4.020%
23	2043	2088	197,900	4.020%
24	2044	2089	197,900	4.020%
25	2045	2090	197,900	4.020%
26	2046	2091	197,900	4.020%
27	2047	2092	197,900	4.020%
28	2048	2093	197,900	4.020%
29	2049	2094	197,900	4.020%
30	2050	2095	197,900	4.020%
31	2051	2096	197,900	4.020%
32	2052	2097	197,900	4.020%
33	2053	2098	197,900	4.020%
34	2054	2099	197,900	4.020%
35	2055	2100	197,900	4.020%
36	2056	2101	197,900	4.020%
37	2057	2102	197,900	4.020%
38	2058	2103	197,900	4.020%
39	2059	2104	197,900	4.020%
40	2060	2105	197,900	4.020%
41	2061	2106	197,900	4.020%
42	2062	2107	197,900	4.020%
43	2063	2108	197,900	4.020%
44	2064	2109	197,900	4.020%
45	2065	2110	197,900	4.020%
46	2066	2111	197,900	4.020%
47	2067	2112	197,900	4.020%
48	2068	2113	197,900	4.020%
49	2069	2114	197,900	4.020%
50	2070	2115	197,900	4.020%

**Table 10B**  
**Corps/Reclamation Replacements (FY 2017)**  
**(\$000s)**

	A	B	C	D
	In Service Date	Due Date	Current Principal	Interest Rate
1	2022	2067	213,150	4.150%
2	2023	2068	213,150	4.150%
3	2024	2069	213,150	4.150%
4	2025	2070	213,150	4.150%
5	2026	2071	213,150	4.150%
6	2027	2072	213,150	4.150%
7	2028	2073	213,150	4.150%
8	2029	2074	213,150	4.150%
9	2030	2075	213,150	4.150%
10	2031	2076	213,150	4.150%
11	2032	2077	213,150	4.150%
12	2033	2078	213,150	4.150%
13	2034	2079	213,150	4.150%
14	2035	2080	213,150	4.150%
15	2036	2081	213,150	4.150%
16	2037	2082	213,150	4.150%
17	2038	2083	213,150	4.150%
18	2039	2084	213,150	4.150%
19	2040	2085	213,150	4.150%
20	2041	2086	213,150	4.150%
21	2042	2087	213,150	4.150%
22	2043	2088	213,150	4.150%
23	2044	2089	213,150	4.150%
24	2045	2090	213,150	4.150%
25	2046	2091	213,150	4.150%
26	2047	2092	213,150	4.150%
27	2048	2093	213,150	4.150%
28	2049	2094	213,150	4.150%
29	2050	2095	213,150	4.150%
30	2051	2096	213,150	4.150%
31	2052	2097	213,150	4.150%
32	2053	2098	213,150	4.150%
33	2054	2099	213,150	4.150%
34	2055	2100	213,150	4.150%
35	2056	2101	213,150	4.150%
36	2057	2102	213,150	4.150%
37	2058	2103	213,150	4.150%
38	2059	2104	213,150	4.150%
39	2060	2105	213,150	4.150%
40	2061	2106	213,150	4.150%
41	2062	2107	213,150	4.150%
42	2063	2108	213,150	4.150%
43	2064	2109	213,150	4.150%
44	2065	2110	213,150	4.150%
45	2066	2111	213,150	4.150%
46	2067	2112	213,150	4.150%
47	2068	2113	213,150	4.150%
48	2069	2114	213,150	4.150%
49	2070	2115	213,150	4.150%
50	2071	2116	213,150	4.150%

**Table 10C**  
**Columbia Generating Station Replacements**  
**(\$000s)**

	A	B
	Fiscal Year	Total Debt Service
1	2045	489,037
2	2046	489,034
3	2047	489,038
4	2048	489,035
5	2049	489,036
6	2050	489,036
7	2051	489,035
8	2052	489,035
9	2053	489,035
10	2054	489,036
11	2055	489,037
12	2056	489,034
13	2057	489,034
14	2058	489,033
15	2059	489,039
16	2060	489,037
17	2061	489,038
18	2062	489,035
19	2063	489,035
20	2064	489,038
21	2065	489,035
22	2066	489,034
23	2067	489,038
24	2068	489,034
25	2069	489,035
26	2070	489,034
27	2071	489,034
28	2072	489,038
29	2073	489,036
30	2074	489,036
31	2075	489,038
32	2076	489,036
33	2077	489,034
34	2078	489,033
35	2079	489,034
36	2080	462,225
37	2081	462,225
38	2082	462,225
39	2083	462,225
40	2084	462,225
41	2085	462,225
42	2086	462,225
43	2087	462,225
44	2088	462,225
45	2089	462,225
46	2090	462,225
47	2091	462,225
48	2092	462,225
49	2093	462,225
50	2094	462,225



**11. REPAYMENT STUDY DATA, FY 2020 STUDY**

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1	Albeni Falls	09/1955	09/2005	6.910%	25,494	0		
2	Albeni Falls	09/1956	09/2005	6.910%	11	0		
3	Albeni Falls	09/1957	09/2005	6.910%	10	0		
4	Albeni Falls	09/1958	09/2005	6.910%	11	0		
5	Albeni Falls	09/1959	09/2005	6.910%	11	0		
6	Albeni Falls	09/1960	09/2005	6.910%	10	0		
7	Albeni Falls	09/1961	09/2005	6.910%	11	0		
8	Albeni Falls	09/1962	09/2005	6.910%	11	0		
9	Albeni Falls	09/1963	09/2005	6.910%	10	0		
10	Albeni Falls	09/1964	09/2005	6.910%	11	0		
11	Albeni Falls	09/1965	09/2005	6.910%	11	0		
12	Albeni Falls	09/1966	09/2005	6.910%	10	0		
13	Albeni Falls	09/1967	09/2005	6.910%	11	0		
14	Albeni Falls	09/1968	09/2005	6.910%	11	0		
15	Albeni Falls	09/1969	09/2005	6.910%	10	0		
16	Albeni Falls	09/1970	09/2005	6.910%	11	0		
17	Albeni Falls	09/1971	09/2005	6.910%	11	0		
18	Albeni Falls	09/1972	09/2005	6.910%	10	0		
19	Albeni Falls	09/1973	09/2005	6.910%	11	0		
20	Albeni Falls	09/1974	09/2005	6.910%	11	0		
21	Albeni Falls	09/1975	09/2005	6.910%	10	0		
22	Albeni Falls	09/1976	09/2005	6.910%	11	0		
23	Albeni Falls	09/1977	09/2005	6.910%	11	0		
24	Albeni Falls	09/1978	09/2005	6.910%	10	0		
25	Albeni Falls	09/1979	09/2005	6.910%	11	0		
26	Albeni Falls	09/1980	09/2005	6.910%	11	0		
27	Albeni Falls	09/1981	09/2005	6.910%	10	0		
28	Albeni Falls	09/1982	09/2005	6.910%	11	0		
29	Albeni Falls	09/1983	09/2005	6.910%	11	0		
30	Albeni Falls	09/1985	09/2005	6.910%	7	0		
31	Albeni Falls	09/1986	09/2005	6.910%	293	0		
32	Albeni Falls	09/1987	09/2005	6.910%	12	0		
33	Albeni Falls	09/1987	09/2005	8.888%	15	0		
34	Albeni Falls	09/1988	09/2005	8.500%	328	0		
35	Albeni Falls	09/1989	09/2005	9.250%	221	0		
36	Albeni Falls	09/1990	09/2005	8.875%	1,287	0		
37	Albeni Falls	09/1991	09/2005	8.750%	43	0		
38	Albeni Falls	09/1991	09/2005	8.750%	111	0		
39	Albeni Falls	09/1992	09/2005	8.500%	7	0		
40	Albeni Falls	09/1992	09/2005	8.500%	106	0		
41	Albeni Falls	09/1993	09/2005	7.875%	295	0		
42	Albeni Falls	09/1993	09/2005	7.875%	714	0		
43	Albeni Falls	09/1994	09/2019	7.125%	61	0		
44	Albeni Falls	09/1994	09/2019	7.125%	173	0		
45	Albeni Falls	09/1995	09/2010	7.090%	17	0		
46	Albeni Falls	09/1995	09/2010	7.890%	51	0		
47	Albeni Falls	09/1995	09/2045	7.150%	1,105	0		
48	Albeni Falls	09/1995	09/2045	7.150%	443	0		
49	Albeni Falls	09/1995	09/2045	7.150%	531	0		
50	Albeni Falls	09/1996	09/2016	7.290%	130	0		
51	Albeni Falls	09/1997	09/2047	7.150%	431	0		
52	Albeni Falls	09/2005	09/2055	5.125%	481	0		
53	Albeni Falls	09/2009	09/2059	4.375%	57	57		
54	Albeni Falls	09/2010	09/2060	4.250%	42	42		
55	Boise	09/1912	09/1962	3.000%	1,249	0		
56	Boise	09/1912	09/1962	3.000%	285	0		
57	Boise	09/1926	09/1976	3.000%	190	0		
58	Boise	09/1926	09/1976	3.000%	832	0		
59	Boise	09/1950	09/2000	3.000%	416	0		
60	Boise	09/1950	09/2000	3.000%	95	0		
61	Boise	09/1951	09/2001	3.000%	1,873	0		
62	Boise	09/1951	09/2001	3.000%	428	0		
63	Boise	09/1952	09/2001	3.000%	11	0		
64	Boise	09/1952	09/2001	3.000%	3	0		
65	Boise	09/1953	09/2001	3.000%	11	0		
66	Boise	09/1953	09/2001	3.000%	3	0		
67	Boise	09/1954	09/2001	3.000%	11	0		
68	Boise	09/1954	09/2001	3.000%	3	0		
69	Boise	09/1955	09/2001	3.000%	11	0		
70	Boise	09/1955	09/2001	3.000%	3	0		
71	Boise	09/1956	09/2001	3.000%	11	0		
72	Boise	09/1956	09/2001	3.000%	3	0		
73	Boise	09/1957	09/2001	3.000%	11	0		
74	Boise	09/1957	09/2001	3.000%	3	0		
75	Boise	09/1958	09/2001	3.000%	11	0		
76	Boise	09/1958	09/2001	3.000%	3	0		
77	Boise	09/1959	09/2001	3.000%	11	0		
78	Boise	09/1959	09/2001	3.000%	3	0		
79	Boise	09/1960	09/2001	3.000%	11	0		
80	Boise	09/1960	09/2001	3.000%	3	0		

**TABLE 11A:**  
**HISTORICAL INVESTMENTS**  
**October 1, 2018 - September 30, 2021 Cost Evaluation period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
81	Boise	09/1961	09/2001	3.000%	11	0	
82	Boise	09/1961	09/2001	3.000%	3	0	
83	Boise	09/1962	09/2001	3.000%	11	0	
84	Boise	09/1962	09/2001	3.000%	3	0	
85	Boise	09/1963	09/2001	3.000%	11	0	
86	Boise	09/1963	09/2001	3.000%	3	0	
87	Boise	09/1964	09/2001	3.000%	11	0	
88	Boise	09/1964	09/2001	3.000%	3	0	
89	Boise	09/1965	09/2001	3.000%	11	0	
90	Boise	09/1965	09/2001	3.000%	3	0	
91	Boise	09/1966	09/2001	3.000%	11	0	
92	Boise	09/1966	09/2001	3.000%	3	0	
93	Boise	09/1967	09/2001	3.000%	11	0	
94	Boise	09/1967	09/2001	3.000%	3	0	
95	Boise	09/1968	09/2001	3.000%	11	0	
96	Boise	09/1968	09/2001	3.000%	3	0	
97	Boise	09/1969	09/2001	3.000%	11	0	
98	Boise	09/1969	09/2001	3.000%	3	0	
99	Boise	09/1970	09/2001	3.000%	11	0	
100	Boise	09/1970	09/2001	3.000%	3	0	
101	Boise	09/1971	09/2001	3.000%	11	0	
102	Boise	09/1971	09/2001	3.000%	3	0	
103	Boise	09/1972	09/2001	3.000%	11	0	
104	Boise	09/1972	09/2001	3.000%	3	0	
105	Boise	09/1973	09/2001	3.000%	11	0	
106	Boise	09/1973	09/2001	3.000%	3	0	
107	Boise	09/1974	09/2001	3.000%	11	0	
108	Boise	09/1974	09/2001	3.000%	3	0	
109	Boise	09/1975	09/2001	3.000%	11	0	
110	Boise	09/1975	09/2001	3.000%	3	0	
111	Boise	09/1976	09/2001	3.000%	11	0	
112	Boise	09/1976	09/2001	3.000%	3	0	
113	Boise	09/1977	09/2001	3.000%	11	0	
114	Boise	09/1977	09/2001	3.000%	3	0	
115	Boise	09/1978	09/2001	3.000%	11	0	
116	Boise	09/1978	09/2001	3.000%	3	0	
117	Boise	09/1979	09/2001	3.000%	11	0	
118	Boise	09/1979	09/2001	3.000%	3	0	
119	Boise	09/1980	09/2001	3.000%	18	0	
120	Boise	09/1980	09/2001	3.000%	4	0	
121	Boise	09/1981	09/2001	3.000%	8	0	
122	Boise	09/1981	09/2001	3.000%	2	0	
123	Boise	09/1982	09/2001	3.000%	1	0	
124	Boise	09/1982	09/2001	3.000%	1	0	
125	Boise	09/1983	09/2001	3.000%	1	0	
126	Boise	09/1984	09/2001	10.750%	1,325	0	
127	Boise	09/1984	09/2001	10.750%	303	0	
128	Boise	09/1986	09/2001	6.710%	94	0	
129	Boise	09/1988	09/2001	8.500%	3	0	
130	Boise	09/1989	09/2001	9.250%	3,264	0	
131	Boise	09/1990	09/2001	8.875%	38	0	
132	Boise	09/1991	09/2001	8.750%	50	0	
133	Boise	09/1993	09/2001	7.875%	418	0	
134	Boise	09/1994	09/1999	7.125%	7	0	
135	Boise	09/1996	09/2046	6.950%	7	0	
136	Boise	09/1996	09/2046	7.150%	442	0	
137	Boise	09/1996	09/2046	7.150%	656	0	
138	Boise	09/1997	09/2047	6.950%	9	0	
139	Boise	09/1997	09/2047	7.150%	2,266	0	
140	Boise	09/2005	09/2055	5.125%	903	0	
141	Boise	09/2006	09/2056	4.500%	15	15	
142	Boise	09/2007	09/2057	5.000%	76	0	
143	Boise	09/2008	09/2058	4.875%	64	64	
144	Boise	09/2009	09/2059	4.375%	2	2	
145	Boise	09/2015	09/2065	3.250%	0	0	
146	Boise	09/2016	09/2066	3.000%	118	118	
147	Bonneville 2nd Powerhouse	09/1981	09/2031	7.150%	40,964	0	
148	Bonneville 2nd Powerhouse	09/1981	09/2031	7.150%	455	0	
149	Bonneville 2nd Powerhouse	09/1982	09/2032	7.150%	203,535	0	
150	Bonneville 2nd Powerhouse	09/1982	09/2032	7.150%	2,264	0	
151	Bonneville 2nd Powerhouse	09/1983	09/2033	7.150%	62,409	0	
152	Bonneville 2nd Powerhouse	09/1983	09/2033	7.150%	694	0	
153	Bonneville 2nd Powerhouse	09/1985	09/2033	7.150%	9,138	0	
154	Bonneville 2nd Powerhouse	09/1986	09/2033	7.150%	30,578	0	
155	Bonneville 2nd Powerhouse	09/1987	09/2033	7.150%	2,801	0	
156	Bonneville 2nd Powerhouse	09/1988	09/2033	7.150%	1,271	0	
157	Bonneville 2nd Powerhouse	09/1989	09/2033	7.150%	1,232	0	
158	Bonneville 2nd Powerhouse	09/1990	09/2033	7.150%	1,588	0	
159	Bonneville 2nd Powerhouse	09/1991	09/2033	8.750%	3,998	0	
160	Bonneville 2nd Powerhouse	09/1991	09/2033	8.750%	26	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
161	Bonneville 2nd Powerhouse	09/1992	09/2033	8.500%	2,446	0	
162	Bonneville 2nd Powerhouse	09/1993	09/2033	7.875%	3,668	0	
163	Bonneville 2nd Powerhouse	09/1994	09/2044	7.150%	5,700	0	
164	Bonneville 2nd Powerhouse	09/1995	09/2045	7.150%	3,791	0	
165	Bonneville 2nd Powerhouse	09/1996	09/2046	7.150%	376	0	
166	Bonneville Dam	09/1938	09/1988	2.500%	11,726	0	
167	Bonneville Dam	09/1938	09/1988	2.500%	130	0	
168	Bonneville Dam	09/1941	09/1991	2.500%	17,589	0	
169	Bonneville Dam	09/1941	09/1991	2.500%	196	0	
170	Bonneville Dam	09/1942	09/1992	2.500%	5,863	0	
171	Bonneville Dam	09/1942	09/1992	2.500%	65	0	
172	Bonneville Dam	09/1943	09/1993	2.500%	17,589	0	
173	Bonneville Dam	09/1943	09/1993	2.500%	196	0	
174	Bonneville Dam	09/1944	09/1994	2.500%	5,860	0	
175	Bonneville Dam	09/1944	09/1994	2.500%	65	0	
176	Bonneville Dam	09/1945	09/1994	2.500%	82	0	
177	Bonneville Dam	09/1945	09/1994	2.500%	1	0	
178	Bonneville Dam	09/1946	09/1994	2.500%	81	0	
179	Bonneville Dam	09/1946	09/1994	2.500%	1	0	
180	Bonneville Dam	09/1947	09/1994	2.500%	82	0	
181	Bonneville Dam	09/1947	09/1994	2.500%	1	0	
182	Bonneville Dam	09/1948	09/1994	2.500%	81	0	
183	Bonneville Dam	09/1948	09/1994	2.500%	1	0	
184	Bonneville Dam	09/1949	09/1994	2.500%	82	0	
185	Bonneville Dam	09/1949	09/1994	2.500%	1	0	
186	Bonneville Dam	09/1950	09/1994	2.500%	81	0	
187	Bonneville Dam	09/1950	09/1994	2.500%	11	0	
188	Bonneville Dam	09/1951	09/1994	2.500%	81	0	
189	Bonneville Dam	09/1951	09/1994	2.500%	11	0	
190	Bonneville Dam	09/1952	09/1994	2.500%	82	0	
191	Bonneville Dam	09/1952	09/1994	2.500%	1	0	
192	Bonneville Dam	09/1953	09/1994	2.500%	81	0	
193	Bonneville Dam	09/1953	09/1994	2.500%	1	0	
194	Bonneville Dam	09/1954	09/1994	2.500%	82	0	
195	Bonneville Dam	09/1954	09/1994	2.500%	1	0	
196	Bonneville Dam	09/1955	09/1994	2.500%	81	0	
197	Bonneville Dam	09/1955	09/1994	2.500%	1	0	
198	Bonneville Dam	09/1956	09/1994	2.500%	81	0	
199	Bonneville Dam	09/1956	09/1994	2.500%	1	0	
200	Bonneville Dam	09/1957	09/1994	2.500%	82	0	
201	Bonneville Dam	09/1957	09/1994	2.500%	1	0	
202	Bonneville Dam	09/1958	09/1994	2.500%	81	0	
203	Bonneville Dam	09/1958	09/1994	2.500%	1	0	
204	Bonneville Dam	09/1959	09/1994	2.500%	82	0	
205	Bonneville Dam	09/1959	09/1994	2.500%	1	0	
206	Bonneville Dam	09/1960	09/1994	2.500%	81	0	
207	Bonneville Dam	09/1960	09/1994	2.500%	1	0	
208	Bonneville Dam	09/1961	09/1994	2.500%	81	0	
209	Bonneville Dam	09/1961	09/1994	2.500%	1	0	
210	Bonneville Dam	09/1962	09/1994	2.500%	82	0	
211	Bonneville Dam	09/1962	09/1994	2.500%	1	0	
212	Bonneville Dam	09/1963	09/1994	2.500%	81	0	
213	Bonneville Dam	09/1963	09/1994	2.500%	1	0	
214	Bonneville Dam	09/1964	09/1994	2.500%	82	0	
215	Bonneville Dam	09/1964	09/1994	2.500%	1	0	
216	Bonneville Dam	09/1965	09/1994	2.500%	81	0	
217	Bonneville Dam	09/1965	09/1994	2.500%	1	0	
218	Bonneville Dam	09/1966	09/1994	2.500%	81	0	
219	Bonneville Dam	09/1966	09/1994	2.500%	1	0	
220	Bonneville Dam	09/1967	09/1994	2.500%	82	0	
221	Bonneville Dam	09/1967	09/1994	2.500%	1	0	
222	Bonneville Dam	09/1968	09/1994	2.500%	81	0	
223	Bonneville Dam	09/1968	09/1994	2.500%	1	0	
224	Bonneville Dam	09/1969	09/1994	2.500%	82	0	
225	Bonneville Dam	09/1969	09/1994	2.500%	1	0	
226	Bonneville Dam	09/1970	09/1994	2.500%	81	0	
227	Bonneville Dam	09/1970	09/1994	2.500%	1	0	
228	Bonneville Dam	09/1971	09/1994	2.500%	81	0	
229	Bonneville Dam	09/1971	09/1994	2.500%	1	0	
230	Bonneville Dam	09/1972	09/1994	2.500%	82	0	
231	Bonneville Dam	09/1972	09/1994	2.500%	1	0	
232	Bonneville Dam	09/1973	09/1994	2.500%	81	0	
233	Bonneville Dam	09/1973	09/1994	2.500%	1	0	
234	Bonneville Dam	09/1974	09/1994	2.500%	82	0	
235	Bonneville Dam	09/1974	09/1994	2.500%	1	0	
236	Bonneville Dam	09/1975	09/1994	2.500%	81	0	
237	Bonneville Dam	09/1975	09/1994	2.500%	1	0	
238	Bonneville Dam	09/1976	09/1994	2.500%	81	0	
239	Bonneville Dam	09/1976	09/1994	2.500%	1	0	
240	Bonneville Dam	09/1977	09/1994	2.500%	82	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
241	Bonneville Dam	09/1977	09/1994	2.500%	1	0		
242	Bonneville Dam	09/1977	09/2027	7.150%	15,670	0		
243	Bonneville Dam	09/1978	09/1994	2.500%	81	0		
244	Bonneville Dam	09/1978	09/1994	2.500%	1	0		
245	Bonneville Dam	09/1979	09/1994	2.500%	82	0		
246	Bonneville Dam	09/1979	09/1994	2.500%	1	0		
247	Bonneville Dam	09/1980	09/1994	2.500%	81	0		
248	Bonneville Dam	09/1980	09/1994	2.500%	1	0		
249	Bonneville Dam	09/1981	09/1994	2.500%	81	0		
250	Bonneville Dam	09/1981	09/1994	2.500%	1	0		
251	Bonneville Dam	09/1982	09/1994	2.500%	82	0		
252	Bonneville Dam	09/1982	09/1994	2.500%	2	0		
253	Bonneville Dam	09/1983	09/1994	2.500%	81	0		
254	Bonneville Dam	09/1983	09/1994	2.500%	1	0		
255	Bonneville Dam	09/1984	09/1994	10.750%	873	0		
256	Bonneville Dam	09/1984	09/1994	10.750%	10	0		
257	Bonneville Dam	09/1985	09/1994	2.500%	119	0		
258	Bonneville Dam	09/1986	09/1994	2.500%	555	0		
259	Bonneville Dam	09/1986	09/1994	11.375%	454	0		
260	Bonneville Dam	09/1987	09/1994	2.500%	260	0		
261	Bonneville Dam	09/1987	09/1994	8.875%	26	0		
262	Bonneville Dam	09/1988	09/1994	8.500%	4,199	0		
263	Bonneville Dam	09/1988	09/1994	8.500%	10	0		
264	Bonneville Dam	09/1989	09/1994	9.250%	877	0		
265	Bonneville Dam	09/1990	09/1994	8.875%	519	0		
266	Bonneville Dam	09/1990	09/1994	8.875%	651	0		
267	Bonneville Dam	09/1991	09/1994	8.750%	35	0		
268	Bonneville Dam	09/1991	09/1994	8.750%	3,193	0		
269	Bonneville Dam	09/1992	09/1994	8.500%	99	0		
270	Bonneville Dam	09/1992	09/1994	8.500%	25	0		
271	Bonneville Dam	09/1993	09/2018	7.880%	5,011	0		
272	Bonneville Dam	09/1994	09/2029	7.125%	536	0		
273	Bonneville Dam	09/1995	09/2000	7.330%	8	0		
274	Bonneville Dam	09/1995	09/2010	7.090%	25	0		
275	Bonneville Dam	09/1995	09/2020	7.250%	20	0		
276	Bonneville Dam	09/1995	09/2020	7.250%	22	0		
277	Bonneville Dam	09/1995	09/2030	7.860%	53	0		
278	Bonneville Dam	09/1995	09/2035	7.860%	98	0		
279	Bonneville Dam	09/1995	09/2045	7.150%	243	0		
280	Bonneville Dam	09/1995	09/2045	7.150%	410	0		
281	Bonneville Dam	09/1995	09/2045	7.150%	440	0		
282	Bonneville Dam	09/1995	09/2045	7.860%	374	0		
283	Bonneville Dam	09/1996	09/2016	7.290%	834	0		
284	Bonneville Dam	09/1996	09/2031	7.150%	22	0		
285	Bonneville Dam	09/1996	09/2046	7.150%	18	0		
286	Bonneville Dam	09/1996	09/2046	7.150%	18	0		
287	Bonneville Dam	09/1996	09/2046	7.150%	80	0		
288	Bonneville Dam	09/1996	09/2046	7.150%	109	0		
289	Bonneville Dam	09/1996	09/2046	7.150%	142	0		
290	Bonneville Dam	09/1996	09/2046	7.150%	223	0		
291	Bonneville Dam	09/1996	09/2046	7.150%	751	0		
292	Bonneville Dam	09/1996	09/2046	7.150%	1,322	0		
293	Bonneville Dam	09/1997	09/2022	7.230%	122	0		
294	Bonneville Dam	09/1997	09/2032	7.150%	518	0		
295	Bonneville Dam	09/1997	09/2047	7.150%	161	0		
296	Bonneville Dam	09/1999	09/2049	5.375%	19,368	0		
297	Bonneville Dam	09/2000	09/2050	6.125%	24,446	0		
298	Bonneville Dam	09/2001	09/2051	5.875%	2,530	0		
299	Bonneville Dam	09/2002	09/2052	5.500%	448	0		
300	Bonneville Dam	09/2003	09/2053	5.125%	4,581	0		
301	Bonneville Dam	09/2004	09/2054	5.375%	26,741	0		
302	Bonneville Dam	09/2005	09/2055	5.125%	19,725	0		
303	Bonneville Dam	09/2006	09/2056	4.500%	2,628	2,628		
304	Bonneville Dam	09/2007	09/2057	5.000%	1,124	0		
305	Bonneville Dam	09/2008	09/2058	4.875%	14,609	14,609		
306	Bonneville Dam	09/2009	09/2059	4.375%	2,744	2,744		
307	Bonneville Dam	09/2010	09/2060	4.250%	1,425	1,425		
308	Bonneville Dam	09/2011	09/2061	3.750%	10,962	10,962		
309	Bonneville Dam	09/2013	09/2063	2.875%	268	268		
310	Bonneville Dam	09/2014	09/2064	3.875%				
311	Bonneville Dam	09/2015	09/2065	3.250%	102	102		
312	Chief Joseph	09/1955	09/2005	6.910%	29,164	0		
313	Chief Joseph	09/1956	09/2006	6.950%	13,643	0		
314	Chief Joseph	09/1957	09/2007	6.980%	39,586	0		
315	Chief Joseph	09/1958	09/2008	7.020%	31,901	0		
316	Chief Joseph	09/1959	09/2008	7.020%	223	0		
317	Chief Joseph	09/1960	09/2008	7.020%	223	0		
318	Chief Joseph	09/1961	09/2008	7.020%	223	0		
319	Chief Joseph	09/1962	09/2008	7.020%	223	0		
320	Chief Joseph	09/1963	09/2008	7.020%	224	0		

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
321	Chief Joseph	09/1964	09/2008	7.020%	223	0	
322	Chief Joseph	09/1965	09/2008	7.020%	223	0	
323	Chief Joseph	09/1966	09/2008	7.020%	223	0	
324	Chief Joseph	09/1967	09/2008	7.020%	223	0	
325	Chief Joseph	09/1968	09/2008	7.020%	224	0	
326	Chief Joseph	09/1969	09/2008	7.020%	223	0	
327	Chief Joseph	09/1970	09/2008	7.020%	223	0	
328	Chief Joseph	09/1971	09/2008	7.020%	223	0	
329	Chief Joseph	09/1972	09/2008	7.020%	223	0	
330	Chief Joseph	09/1973	09/2008	7.020%	224	0	
331	Chief Joseph	09/1974	09/2008	7.020%	223	0	
332	Chief Joseph	09/1975	09/2008	7.020%	223	0	
333	Chief Joseph	09/1976	09/2008	7.020%	223	0	
334	Chief Joseph	09/1977	09/2008	7.020%	223	0	
335	Chief Joseph	09/1977	09/2027	7.150%	30,512	0	
336	Chief Joseph	09/1978	09/2008	7.020%	224	0	
337	Chief Joseph	09/1978	09/2028	7.150%	75,669	0	
338	Chief Joseph	09/1979	09/2008	7.020%	223	0	
339	Chief Joseph	09/1979	09/2029	7.150%	60,079	0	
340	Chief Joseph	09/1980	09/2008	7.020%	223	0	
341	Chief Joseph	09/1981	09/2008	7.020%	223	0	
342	Chief Joseph	09/1982	09/2008	7.020%	223	0	
343	Chief Joseph	09/1983	09/2008	7.020%	224	0	
344	Chief Joseph	09/1984	09/2008	10.750%	909	0	
345	Chief Joseph	09/1985	09/2008	7.020%	46	0	
346	Chief Joseph	09/1985	09/2029	7.150%	16,372	0	
347	Chief Joseph	09/1986	09/2029	7.150%	5,363	0	
348	Chief Joseph	09/1987	09/2008	8.875%	104	0	
349	Chief Joseph	09/1987	09/2029	7.150%	3,036	0	
350	Chief Joseph	09/1988	09/2029	7.150%	2,722	0	
351	Chief Joseph	09/1989	09/2008	9.250%	327	0	
352	Chief Joseph	09/1989	09/2029	7.150%	2,227	0	
353	Chief Joseph	09/1990	09/2008	8.875%	1,024	0	
354	Chief Joseph	09/1990	09/2029	7.150%	4,505	0	
355	Chief Joseph	09/1991	09/2008	8.750%	34	0	
356	Chief Joseph	09/1991	09/2008	8.750%	293	0	
357	Chief Joseph	09/1991	09/2029	8.750%	3,840	0	
358	Chief Joseph	09/1992	09/2008	8.500%	142	0	
359	Chief Joseph	09/1992	09/2008	8.500%	717	0	
360	Chief Joseph	09/1992	09/2029	8.500%	2,032	0	
361	Chief Joseph	09/1993	09/2008	7.875%	42	0	
362	Chief Joseph	09/1993	09/2008	7.875%	794	0	
363	Chief Joseph	09/1993	09/2029	7.875%	1,360	0	
364	Chief Joseph	09/1994	09/2029	7.125%	129	0	
365	Chief Joseph	09/1994	09/2029	7.125%	65	0	
366	Chief Joseph	09/1994	09/2044	7.150%	4,280	0	
367	Chief Joseph	09/1995	09/2010	7.090%	15	0	
368	Chief Joseph	09/1995	09/2045	7.150%	147	0	
369	Chief Joseph	09/1995	09/2045	7.150%	562	0	
370	Chief Joseph	09/1995	09/2045	7.150%	712	0	
371	Chief Joseph	09/1995	09/2045	7.150%	784	0	
372	Chief Joseph	09/1996	09/2031	7.150%	27	0	
373	Chief Joseph	09/1996	09/2046	7.150%	3	0	
374	Chief Joseph	09/1996	09/2046	7.150%	4	0	
375	Chief Joseph	09/1996	09/2046	7.150%	355	0	
376	Chief Joseph	09/1996	09/2046	7.150%	729	0	
377	Chief Joseph	09/1997	09/2032	7.150%	166	0	
378	Chief Joseph	09/1997	09/2047	7.150%	657	0	
379	Chief Joseph	09/2001	09/2051	5.875%	345	0	
380	Chief Joseph	09/2002	09/2052	5.500%	2	0	
381	Chief Joseph	09/2003	09/2053	5.125%	992	0	
382	Chief Joseph	09/2008	09/2058	4.875%	3,500	3,500	
383	Chief Joseph	09/2009	09/2059	4.375%	24,727	24,727	
384	Chief Joseph	09/2011	09/2061	3.750%	4	4	
385	Chief Joseph	09/2012	09/2062	3.375%	28	28	
386	Chief Joseph	09/2013	09/2063	2.875%	10	10	
387	Columbia Basin	09/1941	09/1991	3.000%	10,919	0	
388	Columbia Basin	09/1941	09/1991	3.000%	1,505	0	
389	Columbia Basin	09/1942	09/1992	3.000%	16,165	0	
390	Columbia Basin	09/1942	09/1992	3.000%	3,011	0	
391	Columbia Basin	09/1943	09/1993	3.000%	8,083	0	
392	Columbia Basin	09/1943	09/1993	3.000%	1,505	0	
393	Columbia Basin	09/1944	09/1994	3.000%	16,165	0	
394	Columbia Basin	09/1944	09/1994	3.000%	3,011	0	
395	Columbia Basin	09/1948	09/1998	3.000%	24,247	0	
396	Columbia Basin	09/1948	09/1998	3.000%	4,516	0	
397	Columbia Basin	09/1949	09/1999	3.000%	24,247	0	
398	Columbia Basin	09/1949	09/1999	3.000%	4,516	0	
399	Columbia Basin	09/1950	09/2000	3.000%	16,165	0	
400	Columbia Basin	09/1950	09/2000	3.000%	3,011	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
401	Columbia Basin	09/1951	09/2001	6.710%	28,255	0	
402	Columbia Basin	09/1951	09/2001	6.710%	5,790	0	
403	Columbia Basin	09/1952	09/2001	6.710%	258	0	
404	Columbia Basin	09/1952	09/2001	6.710%	48	0	
405	Columbia Basin	09/1953	09/2001	6.710%	258	0	
406	Columbia Basin	09/1953	09/2001	6.710%	48	0	
407	Columbia Basin	09/1954	09/2001	6.710%	258	0	
408	Columbia Basin	09/1954	09/2001	6.710%	48	0	
409	Columbia Basin	09/1955	09/2001	6.710%	258	0	
410	Columbia Basin	09/1955	09/2001	6.710%	48	0	
411	Columbia Basin	09/1956	09/2001	6.710%	259	0	
412	Columbia Basin	09/1956	09/2001	6.710%	48	0	
413	Columbia Basin	09/1957	09/2001	6.710%	258	0	
414	Columbia Basin	09/1957	09/2001	6.710%	48	0	
415	Columbia Basin	09/1958	09/2001	6.710%	258	0	
416	Columbia Basin	09/1958	09/2001	6.710%	48	0	
417	Columbia Basin	09/1959	09/2001	6.710%	258	0	
418	Columbia Basin	09/1959	09/2001	6.710%	48	0	
419	Columbia Basin	09/1960	09/2001	6.710%	258	0	
420	Columbia Basin	09/1960	09/2001	6.710%	48	0	
421	Columbia Basin	09/1961	09/2001	6.710%	259	0	
422	Columbia Basin	09/1961	09/2001	6.710%	48	0	
423	Columbia Basin	09/1962	09/2001	6.710%	258	0	
424	Columbia Basin	09/1962	09/2001	6.710%	48	0	
425	Columbia Basin	09/1963	09/2001	6.710%	258	0	
426	Columbia Basin	09/1963	09/2001	6.710%	48	0	
427	Columbia Basin	09/1964	09/2001	6.710%	258	0	
428	Columbia Basin	09/1964	09/2001	6.710%	48	0	
429	Columbia Basin	09/1965	09/2001	6.710%	258	0	
430	Columbia Basin	09/1965	09/2001	6.710%	48	0	
431	Columbia Basin	09/1966	09/2001	6.710%	259	0	
432	Columbia Basin	09/1966	09/2001	6.710%	48	0	
433	Columbia Basin	09/1967	09/2001	6.710%	258	0	
434	Columbia Basin	09/1967	09/2001	6.710%	48	0	
435	Columbia Basin	09/1967	09/2017	7.290%	758	0	
436	Columbia Basin	09/1968	09/2001	6.710%	258	0	
437	Columbia Basin	09/1968	09/2001	6.710%	48	0	
438	Columbia Basin	09/1969	09/2001	6.710%	258	0	
439	Columbia Basin	09/1969	09/2001	6.710%	48	0	
440	Columbia Basin	09/1970	09/2001	6.710%	258	0	
441	Columbia Basin	09/1970	09/2001	6.710%	48	0	
442	Columbia Basin	09/1971	09/2001	6.710%	259	0	
443	Columbia Basin	09/1971	09/2001	6.710%	48	0	
444	Columbia Basin	09/1972	09/2001	6.710%	258	0	
445	Columbia Basin	09/1972	09/2001	6.710%	48	0	
446	Columbia Basin	09/1973	09/2001	6.710%	258	0	
447	Columbia Basin	09/1973	09/2001	6.710%	48	0	
448	Columbia Basin	09/1974	09/2001	6.710%	258	0	
449	Columbia Basin	09/1974	09/2001	6.710%	48	0	
450	Columbia Basin	09/1975	09/2001	6.710%	258	0	
451	Columbia Basin	09/1975	09/2001	6.710%	48	0	
452	Columbia Basin	09/1976	09/2001	6.710%	259	0	
453	Columbia Basin	09/1976	09/2001	6.710%	48	0	
454	Columbia Basin	09/1977	09/2001	6.710%	258	0	
455	Columbia Basin	09/1977	09/2001	6.710%	48	0	
456	Columbia Basin	09/1978	09/2001	6.710%	258	0	
457	Columbia Basin	09/1978	09/2001	6.710%	48	0	
458	Columbia Basin	09/1979	09/2001	6.710%	258	0	
459	Columbia Basin	09/1979	09/2001	6.710%	48	0	
460	Columbia Basin	09/1980	09/2001	6.710%	258	0	
461	Columbia Basin	09/1980	09/2001	6.710%	48	0	
462	Columbia Basin	09/1981	09/2001	6.710%	259	0	
463	Columbia Basin	09/1981	09/2001	6.710%	48	0	
464	Columbia Basin	09/1982	09/2001	6.710%	258	0	
465	Columbia Basin	09/1982	09/2001	6.710%	48	0	
466	Columbia Basin	09/1983	09/2001	6.710%	258	0	
467	Columbia Basin	09/1983	09/2001	6.710%	48	0	
468	Columbia Basin	09/1984	09/2001	10.750%	7,815	0	
469	Columbia Basin	09/1984	09/2001	10.750%	1,455	0	
470	Columbia Basin	09/1985	09/2001	6.710%	236	0	
471	Columbia Basin	09/1985	09/2001	6.710%	11	0	
472	Columbia Basin	09/1985	09/2001	12.375%	7,338	0	
473	Columbia Basin	09/1985	09/2001	12.375%	362	0	
474	Columbia Basin	09/1986	09/2001	6.710%	127	0	
475	Columbia Basin	09/1987	09/2001	6.710%	13	0	
476	Columbia Basin	09/1988	09/2001	8.500%	184	0	
477	Columbia Basin	09/1988	09/2001	8.500%	2	0	
478	Columbia Basin	09/1989	09/2001	9.250%	1,166	0	
479	Columbia Basin	09/1990	09/2001	8.875%	928	0	
480	Columbia Basin	09/1991	09/2001	8.750%	177	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
481	Columbia Basin	09/1991	09/2001	8.750%	1,661	0		
482	Columbia Basin	09/1992	09/2001	8.500%	445	0		
483	Columbia Basin	09/1992	09/2001	8.500%	652	0		
484	Columbia Basin	09/1993	09/2001	6.710%	792	0		
485	Columbia Basin	09/1995	09/2000	6.620%	25	0		
486	Columbia Basin	09/1995	09/2020	7.250%	206	0		
487	Columbia Basin	09/1995	09/2030	7.150%	25	0		
488	Columbia Basin	09/1995	09/2030	7.860%	270	0		
489	Columbia Basin	09/1995	09/2030	7.860%	321	0		
490	Columbia Basin	09/1995	09/2030	7.860%	323	0		
491	Columbia Basin	09/1995	09/2030	7.860%	20	0		
492	Columbia Basin	09/1995	09/2045	7.150%	287	0		
493	Columbia Basin	09/1995	09/2045	7.150%	2,511	0		
494	Columbia Basin	09/1995	09/2045	7.860%	450	0		
495	Columbia Basin	09/1995	09/2045	7.860%	450	0		
496	Columbia Basin	09/1996	09/2026	7.150%	72	0		
497	Columbia Basin	09/1996	09/2031	7.150%	109	0		
498	Columbia Basin	09/1996	09/2031	7.150%	251	0		
499	Columbia Basin	09/1996	09/2046	7.150%	426	0		
500	Columbia Basin	09/1996	09/2046	7.150%	368	0		
501	Columbia Basin	09/1997	09/2047	7.150%	3,393	0		
502	Columbia Basin	09/2001	09/2051	5.875%	69,226	0		
503	Columbia Basin	09/2005	09/2055	5.125%	10,963	0		
504	Columbia Basin	09/2006	09/2056	4.500%	1,987	1,987		
505	Columbia Basin	09/2007	09/2057	5.000%	929	0		
506	Columbia Basin	09/2008	09/2058	4.875%	835	835		
507	Columbia Basin	09/2009	09/2059	4.375%	1,338	1,338		
508	Columbia Basin	09/2010	09/2060	4.250%	877	877		
509	Columbia Basin	09/2011	09/2061	3.750%	1,723	1,723		
510	Columbia Basin	09/2012	09/2062	3.375%	11	11		
511	Columbia Basin	09/2013	09/2063	2.875%	3,078	3,078		
512	Columbia Basin	09/2014	09/2064	3.875%	0	0		
513	Columbia Basin	09/2015	09/2065	3.250%	0	0		
514	Columbia Basin	09/2017	09/2067	2.375%	2,865	2,865		
515	Columbia Basin	09/2018	09/2068	2.750%	52	52		
516	Columbia Basin 3rd	09/1975	09/2025	7.160%	47,328	0		
517	Columbia Basin 3rd	09/1975	09/2025	7.160%	8,702	0		
518	Columbia Basin 3rd	09/1976	09/2026	7.150%	41,330	0		
519	Columbia Basin 3rd	09/1976	09/2026	7.150%	8,037	0		
520	Columbia Basin 3rd	09/1977	09/2027	7.150%	42,764	0		
521	Columbia Basin 3rd	09/1977	09/2027	7.150%	7,964	0		
522	Columbia Basin 3rd	09/1978	09/2028	7.150%	42,399	0		
523	Columbia Basin 3rd	09/1978	09/2028	7.150%	7,896	0		
524	Columbia Basin 3rd	09/1979	09/2029	7.150%	84,118	0		
525	Columbia Basin 3rd	09/1979	09/2029	7.150%	15,666	0		
526	Columbia Basin 3rd	09/1983	09/2033	7.150%	712	0		
527	Columbia Basin 3rd	09/1983	09/2033	7.150%	13,003	0		
528	Columbia Basin 3rd	09/1984	09/2033	7.150%	16,965	0		
529	Columbia Basin 3rd	09/1984	09/2033	7.150%	13,192	0		
530	Columbia Basin 3rd	09/1984	09/2033	7.150%	3,160	0		
531	Columbia Basin 3rd	09/1985	09/2033	7.150%	2,060	0		
532	Columbia Basin 3rd	09/1985	09/2033	7.150%	41,772	0		
533	Columbia Basin 3rd	09/1985	09/2033	7.150%	107	0		
534	Columbia Basin 3rd	09/1986	09/2033	7.150%	1,851	0		
535	Columbia Basin 3rd	09/1986	09/2033	7.150%	15,538	0		
536	Columbia Basin 3rd	09/1987	09/2033	7.150%	1,730	0		
537	Columbia Basin 3rd	09/1987	09/2033	7.150%	14,439	0		
538	Columbia Basin 3rd	09/1988	09/2033	7.150%	2,294	0		
539	Columbia Basin 3rd	09/1988	09/2033	7.150%	4,351	0		
540	Columbia Basin 3rd	09/1989	09/2033	7.150%	10,902	0		
541	Columbia Basin 3rd	09/1990	09/2033	7.150%	6,383	0		
542	Columbia Basin 3rd	09/1994	09/2044	7.150%	12,631	0		
543	Columbia River Fish	09/1991	09/2041	8.500%	3,969	0		
544	Columbia River Fish	09/1992	09/2042	8.500%	874	0		
545	Columbia River Fish	09/1993	09/2043	8.500%	85,846	0		
546	Columbia River Fish	09/1994	09/2044	8.500%	39,454	0		
547	Columbia River Fish	09/1995	09/2045	7.150%	43,343	0		
548	Columbia River Fish	09/1996	09/2046	7.150%	2,431	0		
549	Columbia River Fish	09/1999	09/2049	5.375%	14,115	0		
550	Columbia River Fish	09/2000	09/2050	6.125%	47,006	0		
551	Columbia River Fish	09/2001	09/2051	5.875%	6,168	0		
552	Columbia River Fish	09/2002	09/2052	5.500%	8,797	0		
553	Columbia River Fish	09/2003	09/2053	5.125%	68,440	0		
554	Columbia River Fish	09/2004	09/2054	5.375%	60,581	0		
555	Columbia River Fish	09/2005	09/2055	5.125%	52,039	0		
556	Columbia River Fish	09/2006	09/2056	4.500%	366,395	366,395		
557	Columbia River Fish	09/2007	09/2057	5.000%	53,525	14,765		
558	Columbia River Fish	09/2008	09/2058	4.875%	36,554	36,554		
559	Columbia River Fish	09/2009	09/2059	4.375%	103,203	103,203		
560	Columbia River Fish	09/2010	09/2060	4.250%	56,832	56,832		



**TABLE 11A:  
HISTORICAL INVESTMENTS  
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	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
561	Columbia River Fish	09/2011	09/2061	3.750%	106,014	106,014		
562	Columbia River Fish	09/2012	09/2062	3.375%	101,616	101,616		
563	Columbia River Fish	09/2013	09/2063	2.875%	95,274	95,274		
564	Columbia River Fish	09/2014	09/2064	3.875%	110,071	110,071		
565	Columbia River Fish	09/2015	09/2065	3.250%	64,291	64,291		
566	Columbia River Fish	09/2016	09/2066	3.000%	30,066	30,066		
567	Columbia River Fish	09/2017	09/2067	2.375%	57,719	57,719		
568	Columbia River Fish	09/2018	09/2068	2.750%	48,446	48,446		
569	Cougar	09/1964	09/2014	7.230%	10,414	0		
570	Cougar	09/1965	09/2014	7.230%	20	0		
571	Cougar	09/1966	09/2014	7.230%	20	0		
572	Cougar	09/1967	09/2014	7.230%	20	0		
573	Cougar	09/1968	09/2014	7.230%	20	0		
574	Cougar	09/1969	09/2014	7.230%	20	0		
575	Cougar	09/1970	09/2014	7.230%	20	0		
576	Cougar	09/1971	09/2014	7.230%	20	0		
577	Cougar	09/1972	09/2014	7.230%	20	0		
578	Cougar	09/1973	09/2014	7.230%	20	0		
579	Cougar	09/1974	09/2014	7.230%	19	0		
580	Cougar	09/1975	09/2014	7.230%	20	0		
581	Cougar	09/1976	09/2014	7.230%	20	0		
582	Cougar	09/1977	09/2014	7.230%	20	0		
583	Cougar	09/1978	09/2014	7.230%	20	0		
584	Cougar	09/1979	09/2014	7.230%	20	0		
585	Cougar	09/1980	09/2014	7.230%	20	0		
586	Cougar	09/1981	09/2014	7.230%	20	0		
587	Cougar	09/1982	09/2014	7.230%	20	0		
588	Cougar	09/1983	09/2014	7.230%	20	0		
589	Cougar	09/1984	09/2014	10.750%	1	0		
590	Cougar	09/1985	09/2014	7.230%	1	0		
591	Cougar	09/1986	09/2014	7.230%	104	0		
592	Cougar	09/1986	09/2014	11.375%	55	0		
593	Cougar	09/1987	09/2014	7.230%	45	0		
594	Cougar	09/1988	09/2014	8.500%	2	0		
595	Cougar	09/1989	09/2014	9.250%	6	0		
596	Cougar	09/1990	09/2014	8.875%	10	0		
597	Cougar	09/1991	09/2014	8.750%	1,015	0		
598	Cougar	09/1991	09/2014	8.750%	1	0		
599	Cougar	09/1992	09/2014	8.500%	2	0		
600	Cougar	09/1993	09/2014	7.875%	539	0		
601	Cougar	09/1994	09/2019	7.125%	31	0		
602	Cougar	09/1995	09/2000	7.330%	3	0		
603	Cougar	09/1997	09/2047	7.150%	26	0		
604	Cougar	09/2004	09/2054	5.375%	3,622	0		
605	Cougar	09/2005	09/2055	5.125%	8,130	0		
606	Cougar	09/2006	09/2056	4.500%	109	109		
607	Cougar	09/2007	09/2057	5.000%	120	0		
608	Cougar	09/2009	09/2059	4.375%	121	121		
609	Cougar	09/2010	09/2060	4.250%	59	59		
610	Cougar	09/2011	09/2061	3.750%	282	282		
611	Cougar	09/2012	09/2062	3.375%	139	139		
612	Cougar	09/2013	09/2063	2.875%	4,088	4,088		
613	Cougar	09/2014	09/2064	3.875%	12	12		
614	Cougar	09/2016	09/2066	3.000%	2	2		
615	Cougar	09/2017	09/2067	2.375%	2	2		
616	Detroit Lake/Big Cliff	09/1953	09/2003	6.840%	12,533	0		
617	Detroit Lake/Big Cliff	09/1954	09/2004	6.880%	20,162	0		
618	Detroit Lake/Big Cliff	09/1955	09/2004	6.880%	18	0		
619	Detroit Lake/Big Cliff	09/1956	09/2004	6.880%	19	0		
620	Detroit Lake/Big Cliff	09/1957	09/2004	6.880%	18	0		
621	Detroit Lake/Big Cliff	09/1958	09/2004	6.880%	19	0		
622	Detroit Lake/Big Cliff	09/1959	09/2004	6.880%	18	0		
623	Detroit Lake/Big Cliff	09/1960	09/2004	6.880%	19	0		
624	Detroit Lake/Big Cliff	09/1961	09/2004	6.880%	18	0		
625	Detroit Lake/Big Cliff	09/1962	09/2004	6.880%	19	0		
626	Detroit Lake/Big Cliff	09/1963	09/2004	6.880%	18	0		
627	Detroit Lake/Big Cliff	09/1964	09/2004	6.880%	19	0		
628	Detroit Lake/Big Cliff	09/1965	09/2004	6.880%	18	0		
629	Detroit Lake/Big Cliff	09/1966	09/2004	6.880%	19	0		
630	Detroit Lake/Big Cliff	09/1967	09/2004	6.880%	18	0		
631	Detroit Lake/Big Cliff	09/1968	09/2004	6.880%	19	0		
632	Detroit Lake/Big Cliff	09/1969	09/2004	6.880%	18	0		
633	Detroit Lake/Big Cliff	09/1970	09/2004	6.880%	19	0		
634	Detroit Lake/Big Cliff	09/1971	09/2004	6.880%	18	0		
635	Detroit Lake/Big Cliff	09/1972	09/2004	6.880%	19	0		
636	Detroit Lake/Big Cliff	09/1973	09/2004	6.880%	18	0		
637	Detroit Lake/Big Cliff	09/1974	09/2004	6.880%	19	0		
638	Detroit Lake/Big Cliff	09/1975	09/2004	6.880%	18	0		
639	Detroit Lake/Big Cliff	09/1976	09/2004	6.880%	19	0		
640	Detroit Lake/Big Cliff	09/1977	09/2004	6.880%	18	0		

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
641	Detroit Lake/Big Cliff	09/1978	09/2004	6.880%	19	0	
642	Detroit Lake/Big Cliff	09/1979	09/2004	6.880%	18	0	
643	Detroit Lake/Big Cliff	09/1980	09/2004	6.880%	19	0	
644	Detroit Lake/Big Cliff	09/1981	09/2004	6.880%	18	0	
645	Detroit Lake/Big Cliff	09/1982	09/2004	6.880%	19	0	
646	Detroit Lake/Big Cliff	09/1983	09/2004	6.880%	18	0	
647	Detroit Lake/Big Cliff	09/1984	09/2004	10.750%	21	0	
648	Detroit Lake/Big Cliff	09/1985	09/2004	6.880%	6	0	
649	Detroit Lake/Big Cliff	09/1986	09/2004	11.375%	38	0	
650	Detroit Lake/Big Cliff	09/1987	09/2004	6.880%	3	0	
651	Detroit Lake/Big Cliff	09/1987	09/2004	8.875%	233	0	
652	Detroit Lake/Big Cliff	09/1988	09/2004	8.500%	68	0	
653	Detroit Lake/Big Cliff	09/1989	09/2004	9.250%	26	0	
654	Detroit Lake/Big Cliff	09/1990	09/2004	8.875%	115	0	
655	Detroit Lake/Big Cliff	09/1991	09/2004	8.750%	9	0	
656	Detroit Lake/Big Cliff	09/1991	09/2004	8.750%	20	0	
657	Detroit Lake/Big Cliff	09/1992	09/2004	8.500%	8	0	
658	Detroit Lake/Big Cliff	09/1993	09/2004	7.875%	211	0	
659	Detroit Lake/Big Cliff	09/1994	09/1999	7.125%	7	0	
660	Detroit Lake/Big Cliff	09/1995	09/2000	7.330%	13	0	
661	Detroit Lake/Big Cliff	09/1995	09/2045	7.150%	38	0	
662	Detroit Lake/Big Cliff	09/1996	09/2006	6.950%	24	0	
663	Detroit Lake/Big Cliff	09/2001	09/2051	5.875%	282	0	
664	Detroit Lake/Big Cliff	09/2002	09/2052	5.500%	18	0	
665	Detroit Lake/Big Cliff	09/2003	09/2053	5.125%	223	0	
666	Detroit Lake/Big Cliff	09/2005	09/2055	5.125%	1,031	0	
667	Detroit Lake/Big Cliff	09/2013	09/2063	2.875%	528	528	
668	Detroit Lake/Big Cliff	09/2014	09/2064	3.875%	18	18	
669	Detroit Lake/Big Cliff	09/2016	09/2066	3.000%	31	31	
670	Dworshak	09/1973	09/2023	7.190%	138,443	0	
671	Dworshak	09/1973	09/2023	7.190%	836	0	
672	Dworshak	09/1974	09/2023	7.190%	515	0	
673	Dworshak	09/1974	09/2023	7.190%	3	0	
674	Dworshak	09/1975	09/2023	7.190%	518	0	
675	Dworshak	09/1975	09/2023	7.190%	3	0	
676	Dworshak	09/1976	09/2023	7.190%	518	0	
677	Dworshak	09/1976	09/2023	7.190%	3	0	
678	Dworshak	09/1977	09/2023	7.190%	518	0	
679	Dworshak	09/1977	09/2023	7.190%	3	0	
680	Dworshak	09/1978	09/2023	7.190%	518	0	
681	Dworshak	09/1978	09/2023	7.190%	3	0	
682	Dworshak	09/1979	09/2023	7.190%	518	0	
683	Dworshak	09/1979	09/2023	7.190%	3	0	
684	Dworshak	09/1980	09/2023	7.190%	518	0	
685	Dworshak	09/1980	09/2023	7.190%	3	0	
686	Dworshak	09/1981	09/2023	7.190%	518	0	
687	Dworshak	09/1981	09/2023	7.190%	3	0	
688	Dworshak	09/1982	09/2023	7.190%	518	0	
689	Dworshak	09/1982	09/2023	7.190%	3	0	
690	Dworshak	09/1983	09/2023	7.190%	523	0	
691	Dworshak	09/1983	09/2023	7.190%	3	0	
692	Dworshak	09/1984	09/2023	10.750%	2,499	0	
693	Dworshak	09/1984	09/2023	10.750%	15	0	
694	Dworshak	09/1985	09/2023	7.190%	1,141	0	
695	Dworshak	09/1986	09/2023	7.190%	197	0	
696	Dworshak	09/1987	09/2023	7.190%	36	0	
697	Dworshak	09/1987	09/2023	8.875%	65	0	
698	Dworshak	09/1988	09/2023	8.500%	61	0	
699	Dworshak	09/1989	09/2023	9.250%	63	0	
700	Dworshak	09/1990	09/2023	8.875%	245	0	
701	Dworshak	09/1990	09/2023	8.875%	24	0	
702	Dworshak	09/1991	09/2023	8.750%	224	0	
703	Dworshak	09/1992	09/2023	2.625%	4	0	
704	Dworshak	09/1992	09/2023	8.500%	28	0	
705	Dworshak	09/1992	09/2023	8.500%	24	0	
706	Dworshak	09/1993	09/2023	7.875%	41	0	
707	Dworshak	09/1993	09/2023	7.875%	1,872	0	
708	Dworshak	09/1994	09/2029	7.125%	1,351	0	
709	Dworshak	09/1994	09/2029	7.125%	964	0	
710	Dworshak	09/1995	09/2020	7.930%	55	0	
711	Dworshak	09/1995	09/2030	7.150%	218	0	
712	Dworshak	09/1995	09/2045	7.150%	1,162	0	
713	Dworshak	09/1996	09/2011	7.130%	107	0	
714	Dworshak	09/1996	09/2021	7.230%	26	0	
715	Dworshak	09/1996	09/2021	7.230%	184	0	
716	Dworshak	09/1996	09/2031	7.150%	6	0	
717	Dworshak	09/1996	09/2031	7.150%	203	0	
718	Dworshak	09/1996	09/2046	7.150%	3	0	
719	Dworshak	09/1996	09/2046	7.150%	4	0	
720	Dworshak	09/1996	09/2046	7.150%	46	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
721	Dworshak	09/1997	09/2047	7.150%	7,588	0	
722	Dworshak	09/1999	09/2049	5.375%	630	0	
723	Dworshak	09/2002	09/2052	5.500%	199	0	
724	Dworshak	09/2003	09/2053	5.125%	761	0	
725	Dworshak	09/2005	09/2055	5.125%	713	0	
726	Dworshak	09/2006	09/2056	4.500%	73	73	
727	Dworshak	09/2008	09/2058	4.875%	10	10	
728	Dworshak	09/2009	09/2059	4.375%	2,307	2,307	
729	Dworshak	09/2014	09/2064	3.875%	50	0	
730	Green Peter/Foster	09/1967	09/2017	7.290%	24,445	0	
731	Green Peter/Foster	09/1968	09/2018	7.280%	12,180	0	
732	Green Peter/Foster	09/1969	09/2018	7.280%	39	0	
733	Green Peter/Foster	09/1970	09/2018	7.280%	40	0	
734	Green Peter/Foster	09/1971	09/2018	7.280%	39	0	
735	Green Peter/Foster	09/1972	09/2018	7.280%	39	0	
736	Green Peter/Foster	09/1973	09/2018	7.280%	39	0	
737	Green Peter/Foster	09/1974	09/2018	7.280%	39	0	
738	Green Peter/Foster	09/1975	09/2018	7.280%	39	0	
739	Green Peter/Foster	09/1976	09/2018	7.280%	39	0	
740	Green Peter/Foster	09/1977	09/2018	7.280%	39	0	
741	Green Peter/Foster	09/1978	09/2018	7.280%	39	0	
742	Green Peter/Foster	09/1979	09/2018	7.280%	39	0	
743	Green Peter/Foster	09/1980	09/2018	7.280%	40	0	
744	Green Peter/Foster	09/1981	09/2018	7.280%	39	0	
745	Green Peter/Foster	09/1982	09/2018	7.280%	39	0	
746	Green Peter/Foster	09/1983	09/2018	7.280%	39	0	
747	Green Peter/Foster	09/1984	09/2018	10.750%	15	0	
748	Green Peter/Foster	09/1985	09/2018	7.280%	16	0	
749	Green Peter/Foster	09/1986	09/2018	7.280%	3	0	
750	Green Peter/Foster	09/1986	09/2018	11.375%	3	0	
751	Green Peter/Foster	09/1987	09/2018	7.280%	1	0	
752	Green Peter/Foster	09/1987	09/2018	8.875%	2	0	
753	Green Peter/Foster	09/1988	09/2018	8.500%	13	0	
754	Green Peter/Foster	09/1989	09/2018	9.250%	24	0	
755	Green Peter/Foster	09/1990	09/2018	8.875%	5	0	
756	Green Peter/Foster	09/1991	09/2018	8.750%	48	0	
757	Green Peter/Foster	09/1992	09/2018	8.500%	2	0	
758	Green Peter/Foster	09/1993	09/2018	7.875%	41	0	
759	Green Peter/Foster	09/1994	09/1999	7.125%	6	0	
760	Green Peter/Foster	09/1995	09/2000	7.330%	4	0	
761	Green Peter/Foster	09/1995	09/2020	7.250%	11	0	
762	Green Peter/Foster	09/1995	09/2020	7.250%	24	0	
763	Green Peter/Foster	09/1996	09/2046	7.150%	26	0	
764	Green Peter/Foster	09/2001	09/2051	5.875%	200	0	
765	Green Peter/Foster	09/2011	09/2061	3.750%	87	87	
766	Green Peter/Foster	09/2012	09/2062	3.375%	28	28	
767	Green Peter/Foster	09/2014	09/2064	3.875%	385	385	
768	Green Peter/Foster	09/2015	09/2065	3.250%	68	68	
769	Green Peter/Foster	09/2016	09/2066	3.000%	70	70	
770	Hills Creek	09/1962	09/2012	7.160%	10,353	0	
771	Hills Creek	09/1963	09/2012	7.160%	12	0	
772	Hills Creek	09/1964	09/2012	7.160%	13	0	
773	Hills Creek	09/1965	09/2012	7.160%	13	0	
774	Hills Creek	09/1966	09/2012	7.160%	13	0	
775	Hills Creek	09/1967	09/2012	7.160%	13	0	
776	Hills Creek	09/1968	09/2012	7.160%	13	0	
777	Hills Creek	09/1969	09/2012	7.160%	13	0	
778	Hills Creek	09/1970	09/2012	7.160%	13	0	
779	Hills Creek	09/1971	09/2012	7.160%	13	0	
780	Hills Creek	09/1972	09/2012	7.160%	13	0	
781	Hills Creek	09/1973	09/2012	7.160%	13	0	
782	Hills Creek	09/1974	09/2012	7.160%	13	0	
783	Hills Creek	09/1975	09/2012	7.160%	13	0	
784	Hills Creek	09/1976	09/2012	7.160%	13	0	
785	Hills Creek	09/1977	09/2012	7.160%	13	0	
786	Hills Creek	09/1978	09/2012	7.160%	13	0	
787	Hills Creek	09/1979	09/2012	7.160%	13	0	
788	Hills Creek	09/1980	09/2012	7.160%	13	0	
789	Hills Creek	09/1981	09/2012	7.160%	13	0	
790	Hills Creek	09/1982	09/2012	7.160%	13	0	
791	Hills Creek	09/1983	09/2012	7.160%	13	0	
792	Hills Creek	09/1984	09/2012	10.750%	52	0	
793	Hills Creek	09/1985	09/2012	7.160%	6	0	
794	Hills Creek	09/1987	09/2012	8.875%	3	0	
795	Hills Creek	09/1988	09/2012	8.500%	3	0	
796	Hills Creek	09/1990	09/2012	8.875%	3	0	
797	Hills Creek	09/1991	09/2012	8.750%	17	0	
798	Hills Creek	09/1992	09/2012	8.500%	1	0	
799	Hills Creek	09/1993	09/2012	7.875%	13	0	
800	Hills Creek	09/1996	09/2046	7.150%	28	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
801	Hills Creek	09/2000	09/2050	6.125%	2,630	0	
802	Hills Creek	09/2001	09/2051	5.875%	8	0	
803	Hills Creek	09/2002	09/2052	5.500%	2	0	
804	Hills Creek	09/2005	09/2055	5.125%	46	0	
805	Hills Creek	09/2011	09/2061	3.750%	12	12	
806	Hills Creek	09/2012	09/2062	3.375%	142	142	
807	Hungry Horse Dam	09/1953	09/2003	6.840%	75,076	0	
808	Hungry Horse Dam	09/1953	09/2003	6.840%	2,126	0	
809	Hungry Horse Dam	09/1954	09/2003	6.840%	17	0	
810	Hungry Horse Dam	09/1954	09/2003	6.840%	1	0	
811	Hungry Horse Dam	09/1955	09/2003	6.840%	17	0	
812	Hungry Horse Dam	09/1955	09/2003	6.840%	1	0	
813	Hungry Horse Dam	09/1956	09/2003	6.840%	17	0	
814	Hungry Horse Dam	09/1956	09/2003	6.840%	1	0	
815	Hungry Horse Dam	09/1957	09/2003	6.840%	18	0	
816	Hungry Horse Dam	09/1957	09/2003	6.840%	1	0	
817	Hungry Horse Dam	09/1958	09/2003	6.840%	18	0	
818	Hungry Horse Dam	09/1958	09/2003	6.840%	1	0	
819	Hungry Horse Dam	09/1959	09/2003	6.840%	18	0	
820	Hungry Horse Dam	09/1959	09/2003	6.840%	1	0	
821	Hungry Horse Dam	09/1960	09/2003	6.840%	18	0	
822	Hungry Horse Dam	09/1960	09/2003	6.840%	1	0	
823	Hungry Horse Dam	09/1961	09/2003	6.840%	18	0	
824	Hungry Horse Dam	09/1961	09/2003	6.840%	1	0	
825	Hungry Horse Dam	09/1962	09/2003	6.840%	18	0	
826	Hungry Horse Dam	09/1962	09/2003	6.840%	1	0	
827	Hungry Horse Dam	09/1963	09/2003	6.840%	18	0	
828	Hungry Horse Dam	09/1963	09/2003	6.840%	1	0	
829	Hungry Horse Dam	09/1964	09/2003	6.840%	17	0	
830	Hungry Horse Dam	09/1964	09/2003	6.840%	1	0	
831	Hungry Horse Dam	09/1965	09/2003	6.840%	17	0	
832	Hungry Horse Dam	09/1965	09/2003	6.840%	1	0	
833	Hungry Horse Dam	09/1966	09/2003	6.840%	17	0	
834	Hungry Horse Dam	09/1966	09/2003	6.840%	1	0	
835	Hungry Horse Dam	09/1967	09/2003	6.840%	18	0	
836	Hungry Horse Dam	09/1967	09/2003	6.840%	1	0	
837	Hungry Horse Dam	09/1968	09/2003	6.840%	18	0	
838	Hungry Horse Dam	09/1968	09/2003	6.840%	1	0	
839	Hungry Horse Dam	09/1969	09/2003	6.840%	18	0	
840	Hungry Horse Dam	09/1969	09/2003	6.840%	1	0	
841	Hungry Horse Dam	09/1970	09/2003	6.840%	18	0	
842	Hungry Horse Dam	09/1970	09/2003	6.840%	1	0	
843	Hungry Horse Dam	09/1971	09/2003	6.840%	18	0	
844	Hungry Horse Dam	09/1971	09/2003	6.840%	1	0	
845	Hungry Horse Dam	09/1972	09/2003	6.840%	18	0	
846	Hungry Horse Dam	09/1972	09/2003	6.840%	1	0	
847	Hungry Horse Dam	09/1973	09/2003	6.840%	18	0	
848	Hungry Horse Dam	09/1973	09/2003	6.840%	1	0	
849	Hungry Horse Dam	09/1974	09/2003	6.840%	17	0	
850	Hungry Horse Dam	09/1974	09/2003	6.840%	1	0	
851	Hungry Horse Dam	09/1975	09/2003	6.840%	17	0	
852	Hungry Horse Dam	09/1975	09/2003	6.840%	1	0	
853	Hungry Horse Dam	09/1976	09/2003	6.840%	10	0	
854	Hungry Horse Dam	09/1976	09/2003	6.840%	1	0	
855	Hungry Horse Dam	09/1977	09/2003	6.840%	18	0	
856	Hungry Horse Dam	09/1977	09/2003	6.840%	1	0	
857	Hungry Horse Dam	09/1978	09/2003	6.840%	18	0	
858	Hungry Horse Dam	09/1978	09/2003	6.840%	1	0	
859	Hungry Horse Dam	09/1979	09/2003	6.840%	18	0	
860	Hungry Horse Dam	09/1979	09/2003	6.840%	1	0	
861	Hungry Horse Dam	09/1980	09/2003	6.840%	18	0	
862	Hungry Horse Dam	09/1980	09/2003	6.840%	1	0	
863	Hungry Horse Dam	09/1981	09/2003	6.840%	22	0	
864	Hungry Horse Dam	09/1981	09/2003	6.840%	1	0	
865	Hungry Horse Dam	09/1982	09/2003	6.840%	1	0	
866	Hungry Horse Dam	09/1983	09/2003	6.840%	12	0	
867	Hungry Horse Dam	09/1983	09/2003	6.840%	1	0	
868	Hungry Horse Dam	09/1984	09/2003	10.750%	32	0	
869	Hungry Horse Dam	09/1984	09/2003	10.750%	1	0	
870	Hungry Horse Dam	09/1985	09/2003	12.375%	36	0	
871	Hungry Horse Dam	09/1985	09/2003	12.375%	37	0	
872	Hungry Horse Dam	09/1989	09/2003	9.250%	101	0	
873	Hungry Horse Dam	09/1990	09/2003	8.875%	58	0	
874	Hungry Horse Dam	09/1991	09/2003	8.750%	19	0	
875	Hungry Horse Dam	09/1992	09/2003	8.500%	9	0	
876	Hungry Horse Dam	09/1993	09/2003	7.875%	4,136	0	
877	Hungry Horse Dam	09/1993	09/2003	7.875%	2	0	
878	Hungry Horse Dam	09/1994	09/2019	7.125%	56	0	
879	Hungry Horse Dam	09/1995	09/2000	6.620%	156	0	
880	Hungry Horse Dam	09/1995	09/2000	6.620%	84	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
881	Hungry Horse Dam	09/1995	09/2020	7.930%	450	0	
882	Hungry Horse Dam	09/1995	09/2030	7.150%	536	0	
883	Hungry Horse Dam	09/1995	09/2030	7.150%	1,198	0	
884	Hungry Horse Dam	09/1995	09/2045	7.150%	6,190	0	
885	Hungry Horse Dam	09/1995	09/2045	7.860%	14,354	0	
886	Hungry Horse Dam	09/1996	09/2046	7.150%	15	0	
887	Hungry Horse Dam	09/1996	09/2046	7.150%	2	0	
888	Hungry Horse Dam	09/1997	09/2007	6.950%	154	0	
889	Hungry Horse Dam	09/1997	09/2047	7.150%	111	0	
890	Hungry Horse Dam	09/2001	09/2051	5.875%	552	0	
891	Hungry Horse Dam	09/2005	09/2055	5.125%	2,951	0	
892	Hungry Horse Dam	09/2007	09/2057	5.000%	294	0	
893	Hungry Horse Dam	09/2008	09/2058	4.875%	76	76	
894	Hungry Horse Dam	09/2009	09/2059	4.375%	60	60	
895	Hungry Horse Dam	09/2010	09/2060	4.250%	779	779	
896	Hungry Horse Dam	09/2011	09/2061	3.750%	503	503	
897	Hungry Horse Dam	09/2012	09/2062	3.375%	3	3	
898	Hungry Horse Dam	09/2014	09/2064	3.875%	12	12	
899	Hungry Horse Dam	09/2015	09/2065	3.250%			
900	Ice Harbor	09/1962	09/2012	7.160%	59,699	0	
901	Ice Harbor	09/1962	09/2012	7.160%	664	0	
902	Ice Harbor	09/1963	09/2012	7.160%	46	0	
903	Ice Harbor	09/1963	09/2012	7.160%	1	0	
904	Ice Harbor	09/1964	09/2012	7.160%	46	0	
905	Ice Harbor	09/1964	09/2012	7.160%	1	0	
906	Ice Harbor	09/1965	09/2012	7.160%	46	0	
907	Ice Harbor	09/1965	09/2012	7.160%	1	0	
908	Ice Harbor	09/1966	09/2012	7.160%	46	0	
909	Ice Harbor	09/1966	09/2012	7.160%	1	0	
910	Ice Harbor	09/1967	09/2012	7.160%	46	0	
911	Ice Harbor	09/1967	09/2012	7.160%	1	0	
912	Ice Harbor	09/1968	09/2012	7.160%	46	0	
913	Ice Harbor	09/1968	09/2012	7.160%	1	0	
914	Ice Harbor	09/1969	09/2012	7.160%	46	0	
915	Ice Harbor	09/1969	09/2012	7.160%	1	0	
916	Ice Harbor	09/1970	09/2012	7.160%	46	0	
917	Ice Harbor	09/1970	09/2012	7.160%	1	0	
918	Ice Harbor	09/1971	09/2012	7.160%	46	0	
919	Ice Harbor	09/1971	09/2012	7.160%	1	0	
920	Ice Harbor	09/1972	09/2012	7.160%	46	0	
921	Ice Harbor	09/1972	09/2012	7.160%	1	0	
922	Ice Harbor	09/1973	09/2012	7.160%	46	0	
923	Ice Harbor	09/1973	09/2012	7.160%	1	0	
924	Ice Harbor	09/1974	09/2012	7.160%	46	0	
925	Ice Harbor	09/1974	09/2012	7.160%	1	0	
926	Ice Harbor	09/1975	09/2012	7.160%	46	0	
927	Ice Harbor	09/1975	09/2012	7.160%	1	0	
928	Ice Harbor	09/1976	09/2012	7.160%	46	0	
929	Ice Harbor	09/1976	09/2012	7.160%	1	0	
930	Ice Harbor	09/1976	09/2026	7.150%	20,472	0	
931	Ice Harbor	09/1976	09/2026	7.150%	228	0	
932	Ice Harbor	09/1977	09/2012	7.160%	46	0	
933	Ice Harbor	09/1977	09/2012	7.160%	1	0	
934	Ice Harbor	09/1978	09/2012	7.160%	46	0	
935	Ice Harbor	09/1978	09/2012	7.160%	1	0	
936	Ice Harbor	09/1979	09/2012	7.160%	46	0	
937	Ice Harbor	09/1979	09/2012	7.160%	1	0	
938	Ice Harbor	09/1980	09/2012	7.160%	46	0	
939	Ice Harbor	09/1980	09/2012	7.160%	1	0	
940	Ice Harbor	09/1981	09/2012	7.160%	46	0	
941	Ice Harbor	09/1981	09/2012	7.160%	1	0	
942	Ice Harbor	09/1982	09/2012	7.160%	46	0	
943	Ice Harbor	09/1982	09/2012	7.160%	1	0	
944	Ice Harbor	09/1983	09/2012	7.160%	46	0	
945	Ice Harbor	09/1983	09/2012	7.160%	1	0	
946	Ice Harbor	09/1985	09/2012	7.160%	41	0	
947	Ice Harbor	09/1985	09/2026	7.150%	21	0	
948	Ice Harbor	09/1986	09/2012	7.160%	137	0	
949	Ice Harbor	09/1987	09/2012	7.160%	3	0	
950	Ice Harbor	09/1987	09/2012	8.875%	71	0	
951	Ice Harbor	09/1987	09/2012	8.875%	1	0	
952	Ice Harbor	09/1988	09/2012	8.500%	8	0	
953	Ice Harbor	09/1988	09/2012	8.500%	57	0	
954	Ice Harbor	09/1989	09/2012	9.250%	51	0	
955	Ice Harbor	09/1990	09/2012	8.875%	427	0	
956	Ice Harbor	09/1991	09/2012	8.750%	348	0	
957	Ice Harbor	09/1992	09/2012	8.500%	177	0	
958	Ice Harbor	09/1993	09/2012	7.875%	3,192	0	
959	Ice Harbor	09/1993	09/2012	7.875%	1,645	0	
960	Ice Harbor	09/1994	09/2029	7.125%	328	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
961	Ice Harbor	09/1994	09/2029	7.125%	520	0	
962	Ice Harbor	09/1995	09/2000	7.330%	2	0	
963	Ice Harbor	09/1995	09/2019	7.270%	84	0	
964	Ice Harbor	09/1995	09/2019	7.270%	171	0	
965	Ice Harbor	09/1995	09/2019	7.270%	849	0	
966	Ice Harbor	09/1996	09/2031	7.150%	78	0	
967	Ice Harbor	09/1996	09/2041	7.150%	371	0	
968	Ice Harbor	09/1997	09/2022	7.230%	66	0	
969	Ice Harbor	09/1997	09/2047	7.150%	67	0	
970	Ice Harbor	09/1999	09/2049	5.375%	5,516	0	
971	Ice Harbor	09/2000	09/2050	6.125%	548	0	
972	Ice Harbor	09/2001	09/2051	5.875%	764	0	
973	Ice Harbor	09/2002	09/2052	5.500%	1,014	0	
974	Ice Harbor	09/2003	09/2053	5.125%	50	0	
975	Ice Harbor	09/2004	09/2054	5.375%	3,321	0	
976	Ice Harbor	09/2008	09/2058	4.875%	14	14	
977	Ice Harbor	09/2009	09/2059	4.375%	2,615	2,615	
978	Ice Harbor	09/2010	09/2060	4.250%	207	207	
979	Ice Harbor	09/2011	09/2061	3.750%	819	819	
980	Ice Harbor	09/2012	09/2062	3.375%	115	115	
981	Ice Harbor	09/2015	09/2065	3.250%	3,175	3,175	
982	Ice Harbor	09/2016	09/2066	3.000%	558	558	
983	John Day	09/1968	09/2018	7.280%	27,254	0	
984	John Day	09/1969	09/2019	7.270%	96,104	0	
985	John Day	09/1970	09/2020	7.250%	23,656	0	
986	John Day	09/1971	09/2021	7.230%	34,974	0	
987	John Day	09/1972	09/2022	7.210%	11,502	0	
988	John Day	09/1984	09/2022	10.750%	3,677	0	
989	John Day	09/1985	09/2022	7.210%	6,490	0	
990	John Day	09/1985	09/2022	12.375%	1,209	0	
991	John Day	09/1986	09/2022	7.210%	3,227	0	
992	John Day	09/1986	09/2022	11.375%	713	0	
993	John Day	09/1987	09/2022	7.210%	706	0	
994	John Day	09/1987	09/2022	8.875%	4,353	0	
995	John Day	09/1988	09/2022	8.500%	332	0	
996	John Day	09/1988	09/2022	8.500%	199	0	
997	John Day	09/1989	09/2022	7.210%	30	0	
998	John Day	09/1989	09/2022	9.250%	377	0	
999	John Day	09/1990	09/2022	7.210%	37	0	
1000	John Day	09/1990	09/2022	8.875%	543	0	
1001	John Day	09/1991	09/2022	8.750%	13,218	0	
1002	John Day	09/1991	09/2022	8.750%	144	0	
1003	John Day	09/1992	09/2022	7.210%	19	0	
1004	John Day	09/1992	09/2022	8.500%	95	0	
1005	John Day	09/1993	09/2022	7.875%	7,810	0	
1006	John Day	09/1993	09/2022	7.875%	9,585	0	
1007	John Day	09/1994	09/2019	7.125%	14	0	
1008	John Day	09/1994	09/2029	7.125%	1,252	0	
1009	John Day	09/1995	09/2000	7.330%	2	0	
1010	John Day	09/1995	09/2000	7.330%	9	0	
1011	John Day	09/1995	09/2020	7.250%	79	0	
1012	John Day	09/1995	09/2035	7.150%	22	0	
1013	John Day	09/1995	09/2035	7.150%	52	0	
1014	John Day	09/1995	09/2035	7.150%	121	0	
1015	John Day	09/1995	09/2045	7.150%	37	0	
1016	John Day	09/1995	09/2045	7.150%	608	0	
1017	John Day	09/1995	09/2045	7.150%	7,653	0	
1018	John Day	09/1996	09/2011	7.130%	237	0	
1019	John Day	09/1996	09/2016	7.290%	1,072	0	
1020	John Day	09/1997	09/2022	7.230%	133	0	
1021	John Day	09/1997	09/2047	7.150%	179	0	
1022	John Day	09/1999	09/2049	5.375%	3,510	0	
1023	John Day	09/2000	09/2050	6.125%	2,761	0	
1024	John Day	09/2001	09/2051	5.875%	619	0	
1025	John Day	09/2004	09/2054	5.375%	2,830	0	
1026	John Day	09/2005	09/2055	5.125%	2,827	0	
1027	John Day	09/2006	09/2056	4.500%	601	601	
1028	John Day	09/2007	09/2057	5.000%	233	0	
1029	John Day	09/2009	09/2059	4.375%	1,548	1,548	
1030	John Day	09/2010	09/2060	4.250%	356	356	
1031	John Day	09/2011	09/2061	3.750%	175	175	
1032	John Day	09/2012	09/2062	3.375%	6,161	6,161	
1033	John Day	09/2013	09/2063	2.875%	17	17	
1034	John Day	09/2015	09/2065	3.250%	163	163	
1035	Libby	09/1975	09/2025	7.160%	54,644	0	
1036	Libby	09/1976	09/2026	7.150%	153,432	0	
1037	Libby	09/1977	09/2026	7.150%	1,465	0	
1038	Libby	09/1978	09/2026	7.150%	1,465	0	
1039	Libby	09/1979	09/2026	7.150%	1,465	0	
1040	Libby	09/1980	09/2026	7.150%	1,465	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1041	Libby	09/1981	09/2026	7.150%	1,465	0	
1042	Libby	09/1982	09/2026	7.150%	1,465	0	
1043	Libby	09/1983	09/2026	7.150%	1,465	0	
1044	Libby	09/1984	09/2026	10.750%	104	0	
1045	Libby	09/1985	09/2026	7.150%	518	0	
1046	Libby	09/1986	09/2026	7.150%	283	0	
1047	Libby	09/1987	09/2026	7.150%	2	0	
1048	Libby	09/1988	09/2026	8.505%	35	0	
1049	Libby	09/1988	09/2038	7.150%	18,043	0	
1050	Libby	09/1989	09/2026	7.150%	1	0	
1051	Libby	09/1989	09/2026	9.250%	131	0	
1052	Libby	09/1990	09/2026	8.875%	11	0	
1053	Libby	09/1991	09/2026	8.750%	134	0	
1054	Libby	09/1992	09/2026	8.500%	100	0	
1055	Libby	09/1992	09/2026	8.500%	70	0	
1056	Libby	09/1993	09/2026	7.875%	600	0	
1057	Libby	09/1994	09/2029	7.125%	215	0	
1058	Libby	09/1994	09/2029	7.150%	286	0	
1059	Libby	09/1995	09/2030	7.150%	15	0	
1060	Libby	09/1995	09/2030	7.150%	41	0	
1061	Libby	09/1995	09/2030	7.150%	94	0	
1062	Libby	09/1997	09/2022	7.230%	432	0	
1063	Libby	09/1997	09/2047	7.150%	660	0	
1064	Libby	09/2001	09/2051	5.875%	5,562	0	
1065	Libby	09/2008	09/2058	4.875%	1,567	1,567	
1066	Libby	09/2010	09/2060	4.250%	40	40	
1067	Libby	09/2011	09/2061	3.750%	152	152	
1068	Libby	09/2012	09/2062	3.375%	16	16	
1069	Libby	09/2018	09/2068	2.750%	282	282	
1070	Little Goose	09/1970	09/2020	7.250%	22,326	0	
1071	Little Goose	09/1971	09/2021	7.230%	42,962	0	
1072	Little Goose	09/1972	09/2021	7.230%	28	0	
1073	Little Goose	09/1973	09/2021	7.230%	29	0	
1074	Little Goose	09/1974	09/2021	7.230%	28	0	
1075	Little Goose	09/1975	09/2021	7.230%	29	0	
1076	Little Goose	09/1976	09/2021	7.230%	28	0	
1077	Little Goose	09/1977	09/2021	7.230%	29	0	
1078	Little Goose	09/1978	09/2021	7.230%	28	0	
1079	Little Goose	09/1978	09/2028	7.150%	49,578	0	
1080	Little Goose	09/1979	09/2021	7.230%	29	0	
1081	Little Goose	09/1980	09/2021	7.230%	28	0	
1082	Little Goose	09/1981	09/2021	7.230%	29	0	
1083	Little Goose	09/1982	09/2021	7.230%	28	0	
1084	Little Goose	09/1983	09/2021	7.230%	29	0	
1085	Little Goose	09/1984	09/2021	10.750%	201	0	
1086	Little Goose	09/1985	09/2021	7.230%	174	0	
1087	Little Goose	09/1985	09/2028	7.150%	47	0	
1088	Little Goose	09/1986	09/2021	7.230%	239	0	
1089	Little Goose	09/1987	09/2021	7.230%	6	0	
1090	Little Goose	09/1987	09/2021	8.875%	72	0	
1091	Little Goose	09/1988	09/2021	8.500%	12	0	
1092	Little Goose	09/1988	09/2021	8.500%	68	0	
1093	Little Goose	09/1989	09/2021	9.250%	77	0	
1094	Little Goose	09/1990	09/2021	8.875%	408	0	
1095	Little Goose	09/1990	09/2021	8.875%	21	0	
1096	Little Goose	09/1991	09/2021	8.750%	266	0	
1097	Little Goose	09/1992	09/2021	8.500%	66	0	
1098	Little Goose	09/1992	09/2021	8.500%	27	0	
1099	Little Goose	09/1993	09/2021	7.875%	276	0	
1100	Little Goose	09/1993	09/2021	7.875%	3,359	0	
1101	Little Goose	09/1994	09/2019	7.125%	37	0	
1102	Little Goose	09/1994	09/2029	7.125%	2,044	0	
1103	Little Goose	09/1995	09/2040	7.150%	17	0	
1104	Little Goose	09/1995	09/2040	7.150%	450	0	
1105	Little Goose	09/1995	09/2040	7.150%	733	0	
1106	Little Goose	09/1996	09/2046	7.150%	10	0	
1107	Little Goose	09/1996	09/2046	7.150%	10	0	
1108	Little Goose	09/1996	09/2046	7.150%	211	0	
1109	Little Goose	09/1996	09/2046	7.150%	241	0	
1110	Little Goose	09/1996	09/2046	7.150%	520	0	
1111	Little Goose	09/1996	09/2046	7.150%	3,909	0	
1112	Little Goose	09/1997	09/2047	7.150%	1	0	
1113	Little Goose	09/2001	09/2051	5.875%	4,608	0	
1114	Little Goose	09/2002	09/2052	5.500%	27	0	
1115	Little Goose	09/2003	09/2053	5.125%	146	0	
1116	Little Goose	09/2004	09/2054	5.375%	67	0	
1117	Little Goose	09/2008	09/2058	4.875%	13	13	
1118	Little Goose	09/2009	09/2059	4.375%	3,171	3,171	
1119	Little Goose	09/2010	09/2060	4.250%	30	30	
1120	Little Goose	09/2013	09/2063	2.875%	66	66	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1121	Little Goose	09/2018	09/2068	2.750%	2,707	2,707		
1122	Lookout Dam	09/1955	09/2005	6.910%	34,290	0		
1123	Lookout Dam	09/1956	09/2005	6.910%	52	0		
1124	Lookout Dam	09/1957	09/2005	6.910%	51	0		
1125	Lookout Dam	09/1958	09/2005	6.910%	51	0		
1126	Lookout Dam	09/1959	09/2005	6.910%	51	0		
1127	Lookout Dam	09/1960	09/2005	6.910%	51	0		
1128	Lookout Dam	09/1961	09/2005	6.910%	52	0		
1129	Lookout Dam	09/1962	09/2005	6.910%	51	0		
1130	Lookout Dam	09/1963	09/2005	6.910%	51	0		
1131	Lookout Dam	09/1964	09/2005	6.910%	51	0		
1132	Lookout Dam	09/1965	09/2005	6.910%	51	0		
1133	Lookout Dam	09/1966	09/2005	6.910%	51	0		
1134	Lookout Dam	09/1967	09/2005	6.910%	52	0		
1135	Lookout Dam	09/1968	09/2005	6.910%	51	0		
1136	Lookout Dam	09/1969	09/2005	6.910%	51	0		
1137	Lookout Dam	09/1970	09/2005	6.910%	51	0		
1138	Lookout Dam	09/1971	09/2005	6.910%	51	0		
1139	Lookout Dam	09/1972	09/2005	6.910%	51	0		
1140	Lookout Dam	09/1973	09/2005	6.910%	52	0		
1141	Lookout Dam	09/1974	09/2005	6.910%	51	0		
1142	Lookout Dam	09/1975	09/2005	6.910%	51	0		
1143	Lookout Dam	09/1976	09/2005	6.910%	51	0		
1144	Lookout Dam	09/1977	09/2005	6.910%	51	0		
1145	Lookout Dam	09/1978	09/2005	6.910%	51	0		
1146	Lookout Dam	09/1979	09/2005	6.910%	52	0		
1147	Lookout Dam	09/1980	09/2005	6.910%	51	0		
1148	Lookout Dam	09/1981	09/2005	6.910%	51	0		
1149	Lookout Dam	09/1982	09/2005	6.910%	51	0		
1150	Lookout Dam	09/1983	09/2005	6.910%	51	0		
1151	Lookout Dam	09/1984	09/2005	10.750%	185	0		
1152	Lookout Dam	09/1985	09/2005	6.910%	52	0		
1153	Lookout Dam	09/1986	09/2005	6.910%	42	0		
1154	Lookout Dam	09/1987	09/2005	6.910%	9	0		
1155	Lookout Dam	09/1987	09/2005	8.875%	12	0		
1156	Lookout Dam	09/1988	09/2005	8.500%	46	0		
1157	Lookout Dam	09/1988	09/2005	8.500%	17	0		
1158	Lookout Dam	09/1989	09/2005	9.250%	23	0		
1159	Lookout Dam	09/1990	09/2005	8.875%	147	0		
1160	Lookout Dam	09/1990	09/2005	8.875%	4	0		
1161	Lookout Dam	09/1991	09/2005	8.750%	6	0		
1162	Lookout Dam	09/1991	09/2005	8.750%	50	0		
1163	Lookout Dam	09/1992	09/2005	8.500%	181	0		
1164	Lookout Dam	09/1992	09/2005	8.500%	4	0		
1165	Lookout Dam	09/1993	09/2005	7.875%	18	0		
1166	Lookout Dam	09/1993	09/2005	7.875%	189	0		
1167	Lookout Dam	09/1994	09/2019	7.125%	73	0		
1168	Lookout Dam	09/1995	09/2045	7.150%	80	0		
1169	Lookout Dam	09/1995	09/2045	7.150%	33	0		
1170	Lookout Dam	09/1995	09/2045	7.860%	9	0		
1171	Lookout Dam	09/1995	09/2045	7.860%	15	0		
1172	Lookout Dam	09/1995	09/2045	7.860%	31	0		
1173	Lookout Dam	09/1995	09/2045	7.860%	157	0		
1174	Lookout Dam	09/2000	09/2050	6.125%	5,098	0		
1175	Lookout Dam	09/2003	09/2053	5.125%	135	0		
1176	Lookout Dam	09/2005	09/2055	5.125%	7,355	0		
1177	Lookout Dam	09/2007	09/2057	5.000%	572	0		
1178	Lookout Dam	09/2011	09/2061	3.750%	17	17		
1179	Lookout Dam	09/2012	09/2062	3.375%	294	294		
1180	Lost Creek	09/1977	09/2027	7.150%	14,293	0		
1181	Lost Creek	09/1978	09/2027	7.150%	58	0		
1182	Lost Creek	09/1979	09/2027	7.150%	60	0		
1183	Lost Creek	09/1980	09/2027	7.150%	60	0		
1184	Lost Creek	09/1981	09/2027	7.150%	60	0		
1185	Lost Creek	09/1982	09/2027	7.150%	60	0		
1186	Lost Creek	09/1983	09/2027	7.150%	60	0		
1187	Lost Creek	09/1984	09/2027	10.750%	243	0		
1188	Lost Creek	09/1985	09/2027	7.150%	12	0		
1189	Lost Creek	09/1986	09/2027	7.150%	6	0		
1190	Lost Creek	09/1986	09/2027	11.375%	5	0		
1191	Lost Creek	09/1987	09/2027	7.150%	4	0		
1192	Lost Creek	09/1987	09/2027	8.875%	3	0		
1193	Lost Creek	09/1988	09/2027	8.500%	7	0		
1194	Lost Creek	09/1989	09/2027	9.250%	9	0		
1195	Lost Creek	09/1990	09/2027	8.875%	1	0		
1196	Lost Creek	09/1991	09/2027	8.750%	31	0		
1197	Lost Creek	09/1992	09/2027	8.500%	1	0		
1198	Lost Creek	09/1992	09/2027	8.500%	1	0		
1199	Lost Creek	09/1993	09/2027	7.875%	1	0		
1200	Lost Creek	09/1993	09/2027	7.875%	14	0		



**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1201	Lost Creek	09/1995	09/2000	7.330%	4	0	
1202	Lost Creek	09/1995	09/2045	7.150%	94	0	
1203	Lost Creek	09/1996	09/2031	7.150%	31	0	
1204	Lost Creek	09/1996	09/2046	7.150%	24	0	
1205	Lost Creek	09/2001	09/2051	5.875%	147	0	
1206	Lost Creek	09/2011	09/2061	3.750%	7	7	
1207	Lower Granite	09/1975	09/2025	7.160%	119,237	0	
1208	Lower Granite	09/1976	09/2025	7.160%	510	0	
1209	Lower Granite	09/1977	09/2025	7.160%	510	0	
1210	Lower Granite	09/1978	09/2025	7.160%	510	0	
1211	Lower Granite	09/1978	09/2028	7.150%	40,611	0	
1212	Lower Granite	09/1979	09/2025	7.160%	510	0	
1213	Lower Granite	09/1980	09/2025	7.160%	510	0	
1214	Lower Granite	09/1981	09/2025	7.160%	510	0	
1215	Lower Granite	09/1982	09/2025	7.160%	510	0	
1216	Lower Granite	09/1983	09/2025	7.160%	510	0	
1217	Lower Granite	09/1984	09/2025	10.750%	311	0	
1218	Lower Granite	09/1985	09/2025	7.160%	328	0	
1219	Lower Granite	09/1986	09/2025	7.160%	215	0	
1220	Lower Granite	09/1986	09/2025	11.375%	4	0	
1221	Lower Granite	09/1987	09/2025	7.160%	8	0	
1222	Lower Granite	09/1987	09/2025	8.875%	60	0	
1223	Lower Granite	09/1988	09/2025	8.500%	22	0	
1224	Lower Granite	09/1988	09/2025	8.500%	95	0	
1225	Lower Granite	09/1989	09/2025	9.250%	112	0	
1226	Lower Granite	09/1990	09/2025	8.875%	392	0	
1227	Lower Granite	09/1991	09/2025	8.750%	281	0	
1228	Lower Granite	09/1991	09/2025	8.750%	6	0	
1229	Lower Granite	09/1992	09/2025	8.500%	83	0	
1230	Lower Granite	09/1992	09/2025	8.500%	121	0	
1231	Lower Granite	09/1993	09/2025	7.875%	26	0	
1232	Lower Granite	09/1993	09/2025	7.875%	3,272	0	
1233	Lower Granite	09/1994	09/2019	7.125%	38	0	
1234	Lower Granite	09/1994	09/2029	7.150%	3,543	0	
1235	Lower Granite	09/1995	09/2017	7.290%	77	0	
1236	Lower Granite	09/1995	09/2017	7.290%	388	0	
1237	Lower Granite	09/1995	09/2017	7.290%	458	0	
1238	Lower Granite	09/1995	09/2025	7.160%	96	0	
1239	Lower Granite	09/1996	09/2011	7.130%	255	0	
1240	Lower Granite	09/1996	09/2031	7.150%	206	0	
1241	Lower Granite	09/1996	09/2046	7.150%	9	0	
1242	Lower Granite	09/1996	09/2046	7.150%	625	0	
1243	Lower Granite	09/1997	09/2047	7.150%	677	0	
1244	Lower Granite	09/1999	09/2049	5.375%	856	0	
1245	Lower Granite	09/2001	09/2051	5.875%	2,025	0	
1246	Lower Granite	09/2002	09/2052	5.500%	1,275	0	
1247	Lower Granite	09/2003	09/2053	5.125%	42	0	
1248	Lower Granite	09/2005	09/2055	5.125%	393	0	
1249	Lower Granite	09/2008	09/2058	4.875%	24	24	
1250	Lower Granite	09/2009	09/2059	4.375%	5,669	5,669	
1251	Lower Granite	09/2010	09/2060	4.250%	1,156	1,156	
1252	Lower Granite	09/2011	09/2061	3.750%	8	8	
1253	Lower Granite	09/2014	09/2064	3.875%	2,644	2,644	
1254	Lower Granite	09/2015	09/2065	3.250%	1,597	1,597	
1255	Lower Granite	09/2016	09/2066	3.000%	1,878	1,878	
1256	Lower Monument	09/1969	09/2019	7.270%	26,974	0	
1257	Lower Monument	09/1970	09/2020	7.250%	51,218	0	
1258	Lower Monument	09/1971	09/2020	7.250%	214	0	
1259	Lower Monument	09/1972	09/2020	7.250%	214	0	
1260	Lower Monument	09/1973	09/2020	7.250%	214	0	
1261	Lower Monument	09/1974	09/2020	7.250%	214	0	
1262	Lower Monument	09/1975	09/2020	7.250%	214	0	
1263	Lower Monument	09/1976	09/2020	7.250%	214	0	
1264	Lower Monument	09/1977	09/2020	7.250%	214	0	
1265	Lower Monument	09/1978	09/2020	7.250%	214	0	
1266	Lower Monument	09/1979	09/2020	7.250%	214	0	
1267	Lower Monument	09/1979	09/2029	7.150%	40,669	0	
1268	Lower Monument	09/1980	09/2020	7.250%	214	0	
1269	Lower Monument	09/1981	09/2020	7.250%	214	0	
1270	Lower Monument	09/1982	09/2020	7.250%	214	0	
1271	Lower Monument	09/1983	09/2020	7.250%	214	0	
1272	Lower Monument	09/1985	09/2020	7.250%	8	0	
1273	Lower Monument	09/1985	09/2029	7.150%	256	0	
1274	Lower Monument	09/1986	09/2020	7.250%	132	0	
1275	Lower Monument	09/1987	09/2020	7.250%	3	0	
1276	Lower Monument	09/1987	09/2020	8.875%	50	0	
1277	Lower Monument	09/1988	09/2020	8.500%	1	0	
1278	Lower Monument	09/1988	09/2020	8.500%	58	0	
1279	Lower Monument	09/1989	09/2020	9.250%	93	0	
1280	Lower Monument	09/1990	09/2020	8.875%	358	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1281	Lower Monument	09/1991	09/2020	8.750%	594	0		
1282	Lower Monument	09/1992	09/2020	8.500%	4,484	0		
1283	Lower Monument	09/1993	09/2020	7.875%	24	0		
1284	Lower Monument	09/1993	09/2020	7.875%	2,175	0		
1285	Lower Monument	09/1994	09/2019	7.125%	107	0		
1286	Lower Monument	09/1994	09/2029	7.125%	2,167	0		
1287	Lower Monument	09/1995	09/2000	7.330%	6	0		
1288	Lower Monument	09/1995	09/2045	7.150%	41	0		
1289	Lower Monument	09/1995	09/2045	7.150%	99	0		
1290	Lower Monument	09/1995	09/2045	7.150%	624	0		
1291	Lower Monument	09/1995	09/2045	7.150%	1,122	0		
1292	Lower Monument	09/1996	09/2016	7.290%	668	0		
1293	Lower Monument	09/1996	09/2021	7.230%	37	0		
1294	Lower Monument	09/1996	09/2021	7.230%	51	0		
1295	Lower Monument	09/1996	09/2036	7.150%	264	0		
1296	Lower Monument	09/1996	09/2046	7.150%	10	0		
1297	Lower Monument	09/2001	09/2051	5.875%	3,301	0		
1298	Lower Monument	09/2002	09/2052	5.500%	29	0		
1299	Lower Monument	09/2003	09/2053	5.125%	22	0		
1300	Lower Monument	09/2004	09/2054	5.375%	3,423	0		
1301	Lower Monument	09/2005	09/2055	5.125%	527	0		
1302	Lower Monument	09/2006	09/2056	4.500%	285	285		
1303	Lower Monument	09/2008	09/2058	4.875%	9	9		
1304	Lower Monument	09/2009	09/2059	4.375%	2,332	2,332		
1305	Lower Monument	09/2012	09/2062	3.375%	89	89		
1306	Lower Monument	09/2014	09/2064	3.875%	1,430	1,430		
1307	Lower Monument	09/2016	09/2066	3.000%	155	155		
1308	Lower Monument	09/2017	09/2067	2.375%	942	942		
1309	Lower Snake Fish and	09/1983	09/2033	7.150%	30,488	0		
1310	Lower Snake Fish and	09/1985	09/2035	7.150%	47,921	0		
1311	Lower Snake Fish and	09/1987	09/2037	7.150%	72,536	0		
1312	Lower Snake Fish and	09/1988	09/2038	7.150%	805	0		
1313	Lower Snake Fish and	09/1990	09/2040	7.150%	1,557	0		
1314	Lower Snake Fish and	09/1991	09/2041	7.150%	4,411	0		
1315	Lower Snake Fish and	09/1993	09/2043	7.150%	71,632	0		
1316	Lower Snake Fish and	09/1994	09/2044	7.150%	4,722	0		
1317	Lower Snake Fish and	09/1996	09/2046	7.150%	12,085	0		
1318	Lower Snake Fish and	09/1997	09/2047	7.150%	2,173	0		
1319	Lower Snake Fish and	09/1999	09/2049	5.375%	7	0		
1320	Lower Snake Fish and	09/2000	09/2050	6.125%	1,529	0		
1321	Lower Snake Fish and	09/2001	09/2051	5.875%	325	0		
1322	Lower Snake Fish and	09/2002	09/2052	5.500%	890	0		
1323	Lower Snake Fish and	09/2003	09/2053	5.125%	98	0		
1324	Lower Snake Fish and	09/2004	09/2054	5.375%	230	0		
1325	Lower Snake Fish and	09/2005	09/2055	5.125%	4	0		
1326	Lower Snake Fish and	09/2006	09/2056	4.500%	379	379		
1327	Lower Snake Fish and	09/2008	09/2058	4.875%	74	74		
1328	Lower Snake Fish and	09/2009	09/2059	4.375%	1,540	1,540		
1329	Lower Snake Fish and	09/2010	09/2060	4.250%	6	6		
1330	Lower Snake Fish and	09/2011	09/2061	3.750%	122	122		
1331	Lower Snake Fish and	09/2014	09/2064	3.875%	222	222		
1332	Lower Snake Fish and	09/2016	09/2066	3.000%	1,256	1,256		
1333	Lower Snake Fish and	09/2018	09/2068	2.750%	1,608	1,608		
1334	McNary	09/1954	09/2004	6.880%	80,256	0		
1335	McNary	09/1955	09/2005	6.910%	53,493	0		
1336	McNary	09/1956	09/2006	6.950%	38,748	0		
1337	McNary	09/1957	09/2007	6.980%	24,985	0		
1338	McNary	09/1958	09/2007	6.980%	468	0		
1339	McNary	09/1959	09/2007	6.980%	468	0		
1340	McNary	09/1960	09/2007	6.980%	468	0		
1341	McNary	09/1961	09/2007	6.980%	468	0		
1342	McNary	09/1962	09/2007	6.980%	467	0		
1343	McNary	09/1963	09/2007	6.980%	468	0		
1344	McNary	09/1964	09/2007	6.980%	468	0		
1345	McNary	09/1965	09/2007	6.980%	468	0		
1346	McNary	09/1966	09/2007	6.980%	468	0		
1347	McNary	09/1967	09/2007	6.980%	467	0		
1348	McNary	09/1968	09/2007	6.980%	468	0		
1349	McNary	09/1969	09/2007	6.980%	468	0		
1350	McNary	09/1970	09/2007	6.980%	468	0		
1351	McNary	09/1971	09/2007	6.980%	468	0		
1352	McNary	09/1972	09/2007	6.980%	468	0		
1353	McNary	09/1973	09/2007	6.980%	467	0		
1354	McNary	09/1974	09/2007	6.980%	468	0		
1355	McNary	09/1975	09/2007	6.980%	468	0		
1356	McNary	09/1976	09/2007	6.980%	468	0		
1357	McNary	09/1977	09/2007	6.980%	467	0		
1358	McNary	09/1978	09/2007	6.980%	468	0		
1359	McNary	09/1979	09/2007	6.980%	468	0		
1360	McNary	09/1980	09/2007	6.980%	468	0		

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1361	McNary	09/1981	09/2007	6.980%	468	0		
1362	McNary	09/1982	09/2007	6.980%	467	0		
1363	McNary	09/1983	09/2007	6.980%	468	0		
1364	McNary	09/1985	09/2007	6.980%	557	0		
1365	McNary	09/1986	09/2007	6.980%	454	0		
1366	McNary	09/1987	09/2007	6.980%	24	0		
1367	McNary	09/1995	09/2010	7.090%	509	0		
1368	McNary	09/1995	09/2045	7.150%	16	0		
1369	McNary	09/1996	09/2006	6.950%	778	0		
1370	McNary	09/1996	09/2011	7.130%	3	0		
1371	McNary	09/1996	09/2026	7.150%	74	0		
1372	McNary	09/1996	09/2026	7.150%	277	0		
1373	McNary	09/1996	09/2046	7.150%	619	0		
1374	McNary	09/1997	09/2032	7.150%	30	0		
1375	McNary	09/2001	09/2051	5.875%	1,046	0		
1376	McNary	09/2003	09/2053	5.125%	97	0		
1377	McNary	09/2004	09/2054	5.375%	6,138	0		
1378	McNary	09/2005	09/2055	5.125%	550	0		
1379	McNary	09/2006	09/2056	4.500%	4,080	4,080		
1380	McNary	09/2008	09/2058	4.875%	215	215		
1381	McNary	09/2011	09/2061	3.750%	565	565		
1382	McNary	09/2012	09/2062	3.375%	11	11		
1383	McNary	09/2013	09/2063	2.875%	1,000	1,000		
1384	McNary	09/2014	09/2064	3.875%	759	759		
1385	McNary	09/2017	09/2067	2.375%	239	239		
1386	Minidoka/Palisades	09/1909	09/1959	3.000%	854	0		
1387	Minidoka/Palisades	09/1909	09/1959	3.000%	226	0		
1388	Minidoka/Palisades	09/1910	09/1960	3.000%	1,709	0		
1389	Minidoka/Palisades	09/1910	09/1960	3.000%	451	0		
1390	Minidoka/Palisades	09/1911	09/1961	3.000%	1,709	0		
1391	Minidoka/Palisades	09/1911	09/1961	3.000%	451	0		
1392	Minidoka/Palisades	09/1927	09/1977	3.000%	854	0		
1393	Minidoka/Palisades	09/1927	09/1977	3.000%	226	0		
1394	Minidoka/Palisades	09/1942	09/1992	3.000%	854	0		
1395	Minidoka/Palisades	09/1942	09/1992	3.000%	226	0		
1396	Minidoka/Palisades	09/1957	09/2007	3.000%	2,561	0		
1397	Minidoka/Palisades	09/1957	09/2007	3.000%	677	0		
1398	Minidoka/Palisades	09/1958	09/2008	3.000%	854	0		
1399	Minidoka/Palisades	09/1958	09/2008	3.000%	226	0		
1400	Minidoka/Palisades	09/1959	09/2008	3.000%	108	0		
1401	Minidoka/Palisades	09/1959	09/2008	3.000%	28	0		
1402	Minidoka/Palisades	09/1960	09/2008	3.000%	108	0		
1403	Minidoka/Palisades	09/1960	09/2008	3.000%	29	0		
1404	Minidoka/Palisades	09/1961	09/2008	3.000%	108	0		
1405	Minidoka/Palisades	09/1961	09/2008	3.000%	29	0		
1406	Minidoka/Palisades	09/1962	09/2008	3.000%	108	0		
1407	Minidoka/Palisades	09/1962	09/2008	3.000%	28	0		
1408	Minidoka/Palisades	09/1963	09/2008	3.000%	108	0		
1409	Minidoka/Palisades	09/1963	09/2008	3.000%	29	0		
1410	Minidoka/Palisades	09/1964	09/2008	3.000%	108	0		
1411	Minidoka/Palisades	09/1964	09/2008	3.000%	28	0		
1412	Minidoka/Palisades	09/1965	09/2008	3.000%	108	0		
1413	Minidoka/Palisades	09/1965	09/2008	3.000%	29	0		
1414	Minidoka/Palisades	09/1966	09/2008	3.000%	108	0		
1415	Minidoka/Palisades	09/1966	09/2008	3.000%	29	0		
1416	Minidoka/Palisades	09/1967	09/2008	3.000%	108	0		
1417	Minidoka/Palisades	09/1967	09/2008	3.000%	28	0		
1418	Minidoka/Palisades	09/1968	09/2008	3.000%	108	0		
1419	Minidoka/Palisades	09/1968	09/2008	3.000%	29	0		
1420	Minidoka/Palisades	09/1969	09/2008	3.000%	3	0		
1421	Minidoka/Palisades	09/1969	09/2008	3.000%	28	0		
1422	Minidoka/Palisades	09/1970	09/2008	3.000%	108	0		
1423	Minidoka/Palisades	09/1970	09/2008	3.000%	29	0		
1424	Minidoka/Palisades	09/1971	09/2008	3.000%	108	0		
1425	Minidoka/Palisades	09/1971	09/2008	3.000%	29	0		
1426	Minidoka/Palisades	09/1972	09/2008	3.000%	108	0		
1427	Minidoka/Palisades	09/1972	09/2008	3.000%	28	0		
1428	Minidoka/Palisades	09/1973	09/2008	3.000%	108	0		
1429	Minidoka/Palisades	09/1973	09/2008	3.000%	29	0		
1430	Minidoka/Palisades	09/1974	09/2008	3.000%	108	0		
1431	Minidoka/Palisades	09/1974	09/2008	3.000%	28	0		
1432	Minidoka/Palisades	09/1975	09/2008	3.000%	108	0		
1433	Minidoka/Palisades	09/1975	09/2008	3.000%	29	0		
1434	Minidoka/Palisades	09/1976	09/2008	3.000%	108	0		
1435	Minidoka/Palisades	09/1976	09/2008	3.000%	29	0		
1436	Minidoka/Palisades	09/1977	09/2008	7.020%	83	0		
1437	Minidoka/Palisades	09/1977	09/2008	7.020%	28	0		
1438	Minidoka/Palisades	09/1978	09/2008	7.020%	75	0		
1439	Minidoka/Palisades	09/1978	09/2008	7.020%	20	0		
1440	Minidoka/Palisades	09/1979	09/2008	7.020%	75	0		

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1441	Minidoka/Palisades	09/1979	09/2008	7.020%	19	0	
1442	Minidoka/Palisades	09/1980	09/2008	7.020%	75	0	
1443	Minidoka/Palisades	09/1980	09/2008	7.020%	20	0	
1444	Minidoka/Palisades	09/1981	09/2008	7.020%	75	0	
1445	Minidoka/Palisades	09/1981	09/2008	7.020%	20	0	
1446	Minidoka/Palisades	09/1982	09/2008	7.020%	75	0	
1447	Minidoka/Palisades	09/1982	09/2008	7.020%	19	0	
1448	Minidoka/Palisades	09/1983	09/2008	7.020%	65	0	
1449	Minidoka/Palisades	09/1983	09/2008	7.020%	20	0	
1450	Minidoka/Palisades	09/1984	09/2008	10.075%	44	0	
1451	Minidoka/Palisades	09/1984	09/2008	10.075%	11	0	
1452	Minidoka/Palisades	09/1985	09/2008	7.020%	21	0	
1453	Minidoka/Palisades	09/1986	09/2008	7.020%	21	0	
1454	Minidoka/Palisades	09/1986	09/2008	11.375%	48	0	
1455	Minidoka/Palisades	09/1987	09/2008	7.020%	16	0	
1456	Minidoka/Palisades	09/1988	09/2008	8.500%	31	0	
1457	Minidoka/Palisades	09/1989	09/2008	9.250%	20	0	
1458	Minidoka/Palisades	09/1990	09/2008	8.875%	33	0	
1459	Minidoka/Palisades	09/1991	09/2008	8.750%	62	0	
1460	Minidoka/Palisades	09/1991	09/2008	8.750%	11	0	
1461	Minidoka/Palisades	09/1991	09/2008	8.750%	32	0	
1462	Minidoka/Palisades	09/1992	09/2008	8.500%	6	0	
1463	Minidoka/Palisades	09/1994	09/2029	7.125%	351	0	
1464	Minidoka/Palisades	09/1995	09/2000	7.330%	6	0	
1465	Minidoka/Palisades	09/1995	09/2010	7.890%	40	0	
1466	Minidoka/Palisades	09/1996	09/2011	7.130%	54	0	
1467	Minidoka/Palisades	09/1997	09/2007	6.950%	66	0	
1468	Minidoka/Palisades	09/1997	09/2047	7.150%	50,911	0	
1469	Minidoka/Palisades	09/2001	09/2051	5.875%	42	0	
1470	Minidoka/Palisades	09/2012	09/2062	3.375%	7	7	
1471	Minidoka/Palisades	09/2015	09/2065	3.250%	19,237	19,237	
1472	Minidoka/Palisades	09/2016	09/2066	3.000%	206	206	
1473	Minidoka/Palisades	09/2017	09/2067	2.375%	127	127	
1474	Minidoka/Palisades	09/2018	09/2068	2.750%	9	9	
1475	RRP - Green Springs	09/2001	09/2051	5.875%	11,145	0	
1476	RRP - Green Springs	09/2012	09/2062	3.375%	2	2	
1477	RRP - Green Springs	09/2013	09/2063	2.875%			
1478	The Dalles	09/1957	09/2007	2.500%	15,908	0	
1479	The Dalles	09/1958	09/2008	7.020%	45,837	0	
1480	The Dalles	09/1959	09/2009	7.060%	40,415	0	
1481	The Dalles	09/1960	09/2010	7.090%	39,179	0	
1482	The Dalles	09/1961	09/2011	7.130%	9,492	0	
1483	The Dalles	09/1962	09/2011	7.130%	56	0	
1484	The Dalles	09/1963	09/2011	7.130%	57	0	
1485	The Dalles	09/1964	09/2011	7.130%	57	0	
1486	The Dalles	09/1965	09/2011	7.130%	56	0	
1487	The Dalles	09/1966	09/2011	7.130%	57	0	
1488	The Dalles	09/1967	09/2011	7.130%	57	0	
1489	The Dalles	09/1968	09/2011	7.130%	56	0	
1490	The Dalles	09/1969	09/2011	7.130%	57	0	
1491	The Dalles	09/1970	09/2011	7.130%	57	0	
1492	The Dalles	09/1971	09/2011	7.130%	56	0	
1493	The Dalles	09/1972	09/2011	7.130%	57	0	
1494	The Dalles	09/1973	09/2011	7.130%	57	0	
1495	The Dalles	09/1973	09/2023	7.190%	21,983	0	
1496	The Dalles	09/1974	09/2011	7.130%	56	0	
1497	The Dalles	09/1974	09/2024	7.170%	7,268	0	
1498	The Dalles	09/1975	09/2011	7.130%	57	0	
1499	The Dalles	09/1976	09/2011	7.130%	57	0	
1500	The Dalles	09/1977	09/2011	7.130%	56	0	
1501	The Dalles	09/1978	09/2011	7.130%	57	0	
1502	The Dalles	09/1979	09/2011	7.130%	57	0	
1503	The Dalles	09/1980	09/2011	7.130%	56	0	
1504	The Dalles	09/1981	09/2011	7.130%	57	0	
1505	The Dalles	09/1982	09/2011	7.130%	57	0	
1506	The Dalles	09/1983	09/2011	7.130%	56	0	
1507	The Dalles	09/1984	09/2011	10.750%	961	0	
1508	The Dalles	09/1985	09/2011	7.130%	95	0	
1509	The Dalles	09/1985	09/2011	12.375%	280	0	
1510	The Dalles	09/1986	09/2011	7.130%	95	0	
1511	The Dalles	09/1986	09/2011	11.375%	4	0	
1512	The Dalles	09/1987	09/2011	7.130%	1,417	0	
1513	The Dalles	09/1987	09/2011	8.875%	81	0	
1514	The Dalles	09/1988	09/2011	8.500%	685	0	
1515	The Dalles	09/1988	09/2011	8.500%	1	0	
1516	The Dalles	09/1989	09/2011	9.250%	898	0	
1517	The Dalles	09/1990	09/2011	8.875%	319	0	
1518	The Dalles	09/1990	09/2011	8.875%	745	0	
1519	The Dalles	09/1991	09/2011	8.750%	89	0	
1520	The Dalles	09/1991	09/2011	8.750%	2,452	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1521	The Dalles	09/1992	09/2011	8.500%	57	0	
1522	The Dalles	09/1992	09/2011	8.500%	130	0	
1523	The Dalles	09/1993	09/2011	7.875%	2,028	0	
1524	The Dalles	09/1993	09/2011	7.875%	2,929	0	
1525	The Dalles	09/1994	09/2029	7.125%	1,425	0	
1526	The Dalles	09/1996	09/2008	7.020%	196	0	
1527	The Dalles	09/1996	09/2011	7.130%	457	0	
1528	The Dalles	09/1996	09/2046	7.150%	1,991	0	
1529	The Dalles	09/2000	09/2050	6.125%	2,588	0	
1530	The Dalles	09/2002	09/2052	5.500%	1,226	0	
1531	The Dalles	09/2004	09/2054	5.375%	182	0	
1532	The Dalles	09/2005	09/2055	5.125%	36,019	0	
1533	The Dalles	09/2006	09/2056	4.500%	2,030	2,030	
1534	The Dalles	09/2007	09/2057	5.000%	140	0	
1535	The Dalles	09/2008	09/2058	4.875%	1,651	1,651	
1536	The Dalles	09/2015	09/2065	3.250%	302	302	
1537	The Dalles	09/2016	09/2066	3.000%	4	4	
1538	The Dalles	09/2017	09/2067	2.375%	10	10	
1539	The Dalles	09/2018	09/2068	2.750%	14	14	
1540	Yakima	09/1956	09/2022	7.210%	1,068	0	
1541	Yakima	09/1956	09/2022	7.210%	481	0	
1542	Yakima	09/1959	09/2022	7.210%	1	0	
1543	Yakima	09/1960	09/2022	7.210%	1	0	
1544	Yakima	09/1961	09/2022	7.210%	1	0	
1545	Yakima	09/1984	09/2022	10.750%	10	0	
1546	Yakima	09/1984	09/2022	10.750%	35	0	
1547	Yakima	09/1985	09/2022	12.375%	357	0	
1548	Yakima	09/1986	09/2022	7.210%	439	0	
1549	Yakima	09/1986	09/2022	11.375%	7	0	
1550	Yakima	09/1987	09/2022	8.875%	126	0	
1551	Yakima	09/1989	09/2022	9.250%	18	0	
1552	Yakima	09/1990	09/2022	8.875%	40	0	
1553	Yakima	09/1991	09/2022	8.750%	109	0	
1554	Yakima	09/2005	09/2055	5.125%	833	0	
1555	Yakima	09/2009	09/2059	4.375%	15	15	
1556	Yakima	09/2018	09/2068	2.750%	49	49	
1557	Yakima Roza	09/1958	09/2008	7.020%	1,194	0	
1558	Yakima Roza	09/1958	09/2008	7.020%	383	0	
1559	Yakima Roza	09/1984	09/2008	10.750%	17	0	
1560	Yakima Roza	09/1984	09/2008	10.750%	5	0	
1561	Yakima Roza	09/1985	09/2008	7.020%	69	0	
1562	Yakima Roza	09/1985	09/2008	12.375%	5	0	
1563	Yakima Roza	09/1986	09/2008	7.020%	6	0	
1564	Yakima Roza	09/1987	09/2008	7.020%	2	0	
1565	Yakima Roza	09/1987	09/2008	8.875%	9	0	
1566	Yakima Roza	09/2001	09/2051	5.875%	15	0	
1567	Bureau Direct	05/1995	05/2015	7.500%	35,000	0	
1568	Bureau Direct	05/1997	05/2000	6.500%	50,000	0	
1569	Bureau Direct	04/1998	05/2008	6.000%	25,000	0	
1570	Bureau Direct	09/1999	09/2004	6.400%	20,000	0	
1571	Bureau Direct	04/2000	04/2003	6.850%	40,000	0	
1572	Bureau Direct	09/2000	09/2005	6.700%	20,000	0	
1573	Bureau Direct	06/2001	06/2004	4.750%	50,000	0	
1574	Bureau Direct	03/2002	03/2005	4.600%	30,000	0	
1575	Bureau Direct	09/2002	09/2006	3.050%	20,000	0	
1576	Bureau Direct	12/2002	12/2006	3.050%	40,000	0	
1577	Bureau Direct	04/2003	04/2006	2.400%	40,000	0	
1578	Bureau Direct	04/2003	04/2006	2.400%	25,000	0	
1579	Bureau Direct	07/2003	07/2006	2.300%	30,000	0	
1580	Bureau Direct	09/2003	09/2006	2.500%	25,000	0	
1581	Bureau Direct	01/2004	01/2007	2.500%	25,000	0	
1582	Bureau Direct	04/2004	04/2007	2.950%	35,000	0	
1583	Bureau Direct	07/2004	07/2007	3.450%	25,000	0	
1584	Bureau Direct	09/2004	09/2007	3.100%	30,000	0	
1585	Bureau Direct	11/2004	11/2007	3.500%	20,000	0	
1586	Bureau Direct	01/2005	01/2008	3.600%	20,000	0	
1587	Bureau Direct	06/2005	06/2008	3.950%	30,000	0	
1588	Bureau Direct	09/2005	09/2008	4.250%	25,000	0	
1589	Bureau Direct	03/2006	03/2009	5.050%	25,000	0	
1590	Bureau Direct	07/2006	07/2009	5.350%	45,000	0	
1591	Bureau Direct	09/2006	09/2009	4.950%	15,000	0	
1592	Bureau Direct	01/2007	01/2010	5.100%	35,000	0	
1593	Bureau Direct	03/2007	03/2010	4.800%	30,000	0	
1594	Bureau Direct	06/2007	06/2010	5.350%	30,000	0	
1595	Bureau Direct	01/2008	01/2011	2.850%	35,000	0	
1596	Bureau Direct	01/2008	01/2011	2.850%	20,000	0	
1597	Bureau Direct	05/2008	05/2011	3.358%	35,000	0	
1598	Bureau Direct	05/2008	05/2011	3.358%	25,000	0	
1599	Bureau Direct	06/2008	06/2012	3.974%	30,000	0	
1600	Bureau Direct	07/2008	07/2012	3.913%	35,000	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H
Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1601	Bureau Direct	09/2008	09/2012	3.444%	35,000	0	
1602	Bureau Direct	01/2009	01/2021	3.999%	25,000	25,000	
1603	Bureau Direct	04/2009	04/2023	4.391%	25,000	25,000	04/2029 3.660%
1604	Bureau Direct	06/2009	06/2039	5.192%	25,000	25,000	
1605	Bureau Direct	09/2009	09/2019	3.699%	25,000	25,000	
1606	Bureau Direct	10/2009	10/2018	3.719%	24,000	0	
1607	Bureau Direct	10/2009	10/2019	3.842%	20,000	20,000	
1608	Bureau Direct	11/2009	11/2019	3.637%	7,000	7,000	
1609	Bureau Direct	12/2009	12/2019	4.194%	13,000	13,000	
1610	Bureau Direct	01/2010	01/2019	3.714%	10,000	0	
1611	Bureau Direct	02/2010	02/2019	0.165%	10,000	0	
1612	Bureau Direct	03/2010	03/2020	4.083%	30,000	30,000	
1613	Bureau Direct	04/2010	04/2020	3.973%	18,000	18,000	04/2029 3.720%
1614	Bureau Direct	05/2010	05/2020	3.574%	15,000	15,000	05/2029 3.720%
1615	Bureau Direct	06/2010	06/2020	3.243%	10,000	10,000	06/2029 3.720%
1616	Bureau Direct	06/2010	06/2020	3.243%	30,000	30,000	06/2029 3.720%
1617	Bureau Direct	07/2010	07/2020	3.118%	17,000	17,000	07/2029 3.720%
1618	Bureau Direct	08/2010	08/2020	0.165%	5,000	0	
1619	Bureau Direct	09/2010	09/2021	2.883%	22,000	22,000	
1620	Bureau Direct	10/2010	10/2034	4.211%	20,000	20,000	
1621	Bureau Direct	01/2011	09/2011	0.244%	20,000	0	
1622	Bureau Direct	01/2011	09/2011	0.244%	35,000	0	
1623	Bureau Direct	01/2011	01/2039	5.040%	35,000	35,000	
1624	Bureau Direct	02/2011	02/2040	4.995%	50,000	50,000	
1625	Bureau Direct	05/2011	09/2011	0.076%	35,000	0	
1626	Bureau Direct	05/2011	09/2011	0.076%	25,000	0	
1627	Bureau Direct	06/2011	06/2036	4.629%	30,000	30,000	
1628	Bureau Direct	06/2011	06/2038	4.700%	30,000	30,000	
1629	Bureau Direct	08/2011	08/2037	4.208%	30,000	30,000	
1630	Bureau Direct	09/2011	07/2041	3.825%	30,000	0	
1631	Bureau Direct	12/2011	12/2038	3.880%	35,000	0	
1632	Bureau Direct	01/2012	01/2038	3.893%	15,000	0	
1633	Bureau Direct	02/2012	02/2034	2.476%	55,000	55,000	
1634	Bureau Direct	06/2012	06/2041	3.666%	50,000	0	
1635	Bureau Direct	06/2012	09/2012	0.119%	30,000	0	
1636	Bureau Direct	08/2012	07/2042	3.834%	44,000	0	
1637	Bureau Direct	09/2012	09/2013	0.174%	35,000	0	
1638	Bureau Direct	09/2012	09/2042	3.668%	25,000	0	
1639	Bureau Direct	01/2013	01/2043	6.194%	70,000	0	
1640	Bureau Direct	02/2013	02/2043	5.993%	18,000	0	
1641	Bureau Direct	03/2013	03/2043	5.958%	15,000	0	
1642	Bureau Direct	04/2013	04/2043	5.633%	15,000	0	
1643	Bureau Direct	05/2013	05/2043	6.192%	18,000	0	
1644	Bureau Direct	06/2013	01/2039	2.497%	35,000	35,000	
1645	Bureau Direct	06/2013	06/2043	6.938%	21,000	0	
1646	Bureau Direct	07/2013	07/2034	7.164%	25,000	0	
1647	Bureau Direct	08/2013	08/2034	7.413%	15,000	0	
1648	Bureau Direct	11/2013	09/2014	0.140%	77,000	0	
1649	Bureau Direct	11/2013	09/2020	2.473%	51,000	51,000	
1650	Bureau Direct	11/2013	09/2021	2.812%	50,000	50,000	
1651	Bureau Direct	11/2013	09/2022	3.125%	19,000	19,000	
1652	Bureau Direct	01/2014	12/2018	1.943%	43,000	0	
1653	Bureau Direct	01/2014	12/2018	1.943%	38,000	0	
1654	Bureau Direct	01/2014	12/2018	1.943%	21,000	0	
1655	Bureau Direct	01/2014	12/2018	1.943%	26,000	0	
1656	Bureau Direct	01/2014	12/2018	1.943%	14,000	0	
1657	Bureau Direct	09/2014	05/2032	2.544%	16,000	16,000	
1658	Bureau Direct	09/2014	05/2032	2.544%	10,000	10,000	
1659	Bureau Direct	09/2014	06/2033	2.530%	11,000	11,000	
1660	Bureau Direct	09/2014	06/2033	2.530%	12,000	12,000	
1661	Bureau Direct	09/2014	07/2033	2.497%	15,000	15,000	
1662	Bureau Direct	09/2015	09/2033	3.134%	10,000	10,000	
1663	Bureau Direct	04/2016	04/2031	2.661%	17,000	17,000	
1664	Bureau Direct	07/2016	07/2030	2.145%	12,000	12,000	
1665	Bureau Direct	08/2018	01/2045	2.497%	13,000	13,000	
1666	Bureau Direct	08/2018	02/2045	2.476%	5,000	5,000	
1667	Bureau Direct	08/2018	03/2045	2.455%	26,000	26,000	
1668	Bureau Direct	08/2018	06/2045	2.530%	16,000	16,000	
1669	Bureau Direct	09/2018	02/2045	2.476%	29,000	29,000	
1670	Bureau Direct	10/2018	09/2019	2.653%	24,000	24,000	
1671	Bureau Direct	12/2018	09/2019	2.568%	13,000	13,000	
1672	Bureau Direct	12/2018	09/2019	2.568%	14,000	14,000	
1673	Bureau Direct	12/2018	09/2019	2.568%	21,000	21,000	
1674	Bureau Direct	12/2018	09/2019	2.568%	38,000	38,000	
1675	Bureau Direct	12/2018	09/2029	3.100%	13,000	13,000	
1676	Bureau Direct	12/2018	09/2029	3.100%	43,000	43,000	
1677	Bureau Direct	01/2019	09/2019	2.521%	10,000	10,000	
1678	Conservation	09/1983	09/2003	12.200%	140,000	0	
1679	Conservation	09/1984	09/2004	13.050%	150,000	0	
1680	Conservation	09/1985	09/1990	10.150%	50,000	0	

**TABLE 11A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1681	Conservation	03/1986	03/1991	7.800%	50,000	0		
1682	Conservation	03/1986	03/1996	8.150%	50,000	0		
1683	Conservation	04/1987	04/2007	9.300%	75,000	0		
1684	Conservation	06/1987	06/1992	8.350%	50,000	0		
1685	Conservation	04/1988	04/2008	9.900%	90,000	0		
1686	Conservation	07/1989	07/2009	8.550%	40,000	0		
1687	Conservation	09/1989	09/1995	8.600%	66,000	0		
1688	Conservation	09/1989	09/2002	8.650%	66,000	0		
1689	Conservation	07/1992	07/1997	5.800%	80,200	0		
1690	Conservation	07/1992	07/2007	7.140%	100,000	0		
1691	Conservation	10/1992	10/2012	8.050%	50,000	0		
1692	Conservation	02/1993	02/2013	7.400%	50,000	0		
1693	Conservation	08/1993	08/2013	6.750%	40,000	0		
1694	Conservation	01/1994	01/2014	6.750%	50,000	0		
1695	Conservation	05/1994	05/1998	7.100%	50,000	0		
1696	Conservation	05/1995	05/2015	7.500%	85,000	0		
1697	Conservation	01/1996	01/2011	6.700%	30,000	0		
1698	Conservation	11/1996	11/2016	7.200%	40,000	0		
1699	Conservation	05/1998	05/2009	6.000%	37,700	0		
1700	Conservation	09/1998	09/2008	5.300%	104,300	0		
1701	Conservation	09/1998	09/2013	5.600%	52,800	0		
1702	Conservation	07/2000	07/2003	6.950%	32,000	0		
1703	Conservation	06/2002	06/2005	3.750%	40,000	0		
1704	Conservation	01/2004	01/2008	2.950%	30,000	0		
1705	Conservation	03/2006	03/2009	5.050%	20,000	0		
1706	Conservation	06/2007	06/2010	5.350%	20,000	0		
1707	Conservation	09/2008	09/2013	3.701%	10,000	0		
1708	Conservation	09/2009	09/2014	2.746%	15,000	0		
1709	Conservation	01/2010	01/2015	2.609%	15,000	0		
1710	Conservation	04/2010	04/2015	2.677%	20,000	0		
1711	Conservation	08/2010	08/2015	1.619%	15,000	0		
1712	Conservation	09/2010	09/2015	1.534%	10,000	0		
1713	Conservation	01/2011	01/2023	4.046%	40,000	40,000		
1714	Conservation	04/2011	04/2023	3.932%	35,000	35,000		
1715	Conservation	08/2011	08/2023	3.206%	40,000	0		
1716	Conservation	10/2011	08/2012	0.204%	55,000	0		
1717	Conservation	12/2011	12/2037	0.189%	55,000	0		
1718	Conservation	05/2012	09/2015	0.676%	30,000	0		
1719	Conservation	06/2012	09/2015	0.671%	15,000	0		
1720	Conservation	08/2012	08/2024	2.788%	15,000	0		
1721	Conservation	11/2012	11/2016	0.630%	20,000	0		
1722	Conservation	01/2013	01/2018	1.107%	9,000	0		
1723	Conservation	03/2013	03/2025	4.992%	10,000	0		
1724	Conservation	04/2013	04/2025	4.553%	12,000	0		
1725	Conservation	08/2013	08/2025	6.973%	5,000	0		
1726	Conservation	10/2013	10/2025	3.568%	34,000	1,000		
1727	Conservation	11/2013	09/2023	3.375%	27,000	27,000		
1728	Conservation	12/2013	12/2021	3.142%	6,000	6,000		
1729	Conservation	12/2013	12/2023	2.530%	55,000	55,000		
1730	Conservation	01/2014	01/2026	3.621%	5,000	5,000		
1731	Conservation	04/2014	06/2025	2.530%	30,000	30,000		
1732	Conservation	05/2014	04/2024	2.497%	15,000	15,000		
1733	Conservation	05/2014	04/2025	2.497%	3,000	3,000		
1734	Conservation	06/2014	10/2024	2.497%	5,000	5,000		
1735	Conservation	07/2014	07/2025	2.497%	12,000	12,000		
1736	Conservation	08/2014	09/2025	2.455%	4,000	4,000		
1737	Conservation	10/2014	12/2024	2.530%	10,000	10,000		
1738	Conservation	11/2014	03/2027	2.455%	6,000	6,000		
1739	Conservation	12/2014	12/2023	2.403%	7,000	7,000	12/2026	3.680%
1740	Conservation	01/2015	09/2015	0.204%	15,000	0		
1741	Conservation	01/2015	01/2024	1.908%	7,000	0		
1742	Conservation	02/2015	02/2024	2.251%	8,000	0		
1743	Conservation	03/2015	03/2025	2.295%	5,000	0		
1744	Conservation	04/2015	04/2024	2.269%	5,000	5,000	04/2027	3.680%
1745	Conservation	05/2015	05/2021	1.898%	5,000	5,000		
1746	Conservation	07/2015	07/2021	2.067%	14,000	14,000		
1747	Conservation	08/2015	08/2022	2.233%	6,000	6,000		
1748	Conservation	09/2015	09/2022	2.062%	4,000	4,000		
1749	Conservation	10/2015	10/2027	2.497%	25,000	25,000		
1750	Conservation	11/2016	04/2017	0.684%	20,000	0		
1751	Conservation	04/2017	01/2018	1.051%	20,000	0		
1752	Conservation	01/2018	09/2022	2.513%	9,000	9,000		
1753	Conservation	01/2018	09/2022	2.513%	20,000	20,000		
1754	Construction (AS)	10/1992	10/2032	8.350%	38	0		
1755	Construction (AS)	07/1995	07/2025	7.700%	67	0		
1756	Construction (AS)	01/1996	01/2003	5.900%	5,622	0		
1757	Construction (AS)	01/1997	01/2004	6.800%	7,400	0		
1758	Construction (AS)	08/1998	08/2008	5.750%	3,181	0		
1759	Construction (AS)	02/1999	02/2014	5.900%	950	0		
1760	Construction (AS)	07/2000	07/2004	7.000%	10,948	0		

**TABLE 11A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

	A	B	C	D	E	F	G	H
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1761	Construction (AS)	01/2001	01/2010	6.050%	68	0		
1762	Construction (AS)	03/2002	03/2005	4.600%	1,990	0		
1763	Construction (AS)	10/2002	10/2005	3.000%	45,062	0		
1764	Construction (AS)	01/2004	01/2007	2.500%	13,357	0		
1765	Construction (AS)	11/2004	11/2008	3.750%	7,990	0		
1766	Construction (AS)	09/2006	09/2010	4.950%	9,681	0		
1767	Construction (AS)	01/2008	01/2012	3.200%	10,000	0		
1768	Construction (AS)	09/2008	09/2012	3.444%	10,000	0		
1769	Construction (AS)	09/2009	09/2014	2.746%	14,000	0		
1770	Construction (AS)	02/2010	02/2015	0.165%	7,500	0		
1771	Construction (AS)	08/2010	08/2015	1.619%	5,000	0		
1772	Construction (AS)	06/2011	06/2016	1.957%	7,000	0		
1773	Construction (AS)	08/2011	08/2016	1.423%	3,500	0		
1774	Construction (AS)	01/2012	09/2012	0.146%	10,000	0		
1775	Construction (AS)	06/2012	09/2015	0.671%	7,700	0		
1776	Construction (AS)	11/2012	11/2018	1.109%	5,250	5,250		
1777	Construction (AS)	04/2013	04/2017	0.622%	2,450	0		
1778	Construction (AS)	06/2013	06/2017	1.271%	3,000	0		
1779	Construction (AS)	08/2013	08/2017	1.494%	2,000	0		
1780	Construction (AS)	10/2013	10/2019	2.039%	4,200	4,200		
1781	Construction (AS)	10/2013	10/2019	2.039%	5,000	5,000		
1782	Construction (AS)	01/2014	01/2020	2.183%	1,750	1,750		
1783	Construction (AS)	01/2014	01/2020	2.183%	2,000	2,000		
1784	Construction (AS)	02/2014	09/2014	0.117%	950	0		
1785	Construction (AS)	04/2014	03/2020	2.455%	1,400	1,400		
1786	Construction (AS)	04/2014	03/2020	2.455%	2,000	2,000		
1787	Construction (AS)	05/2014	04/2020	2.497%	700	700		
1788	Construction (AS)	07/2014	07/2020	2.497%	1,050	1,050		
1789	Construction (AS)	11/2014	11/2020	1.809%	2,100	2,100		
1790	Construction (AS)	12/2014	12/2020	1.922%	1,050	1,050		
1791	Construction (AS)	02/2015	02/2021	1.761%	1,750	1,750		
1792	Construction (AS)	05/2015	05/2021	1.898%	2,100	2,100		
1793	Construction (AS)	09/2015	09/2017	0.744%	7,700	0		
1794	Construction (AS)	10/2015	10/2021	1.942%	2,800	2,800		
1795	Construction (AS)	02/2016	02/2022	2.476%	3,000	3,000		
1796	Construction (AS)	06/2016	09/2016	0.436%	7,000	0		
1797	Construction (AS)	04/2017	01/2018	1.051%	2,450	0		
1798	Construction (AS)	06/2017	01/2018	1.179%	3,000	0		
1799	Construction (AS)	08/2017	01/2018	1.138%	2,000	0		
1800	Construction (AS)	09/2017	01/2018	1.181%	7,700	0		
1801	Construction (AS)	09/2018	12/2023	3.064%	4,200	4,200		
1802	Corps	09/2015	09/2033	3.134%	4,000	4,000		
1803	Corps	02/2016	02/2045	2.476%	3,000	3,000		
1804	Corps	04/2016	04/2031	2.661%	53,000	53,000		
1805	Corps	05/2016	05/2030	2.599%	15,000	15,000		
1806	Corps	07/2016	07/2030	2.145%	25,000	25,000		
1807	Corps	08/2018	07/2046	2.497%	32,000	32,000		
1808	Corps	08/2018	10/2046	2.497%	27,000	27,000		



**TABLE 11B:  
PROJECTED INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	
Project	In Service Date	Due Date	Interest Rate	Current Principal	Roll Maturity Date	Rollover Rate	
1	Bureau Direct	07/2020	07/2050	3.590%	40,000		
2	Bureau Direct	08/2020	08/2050	3.590%	40,000		
3	Bureau Direct	09/2020	09/2050	3.590%	42,000		
4	Columbia River Fish Mitigation	09/2019	09/2069	3.130%	87,381		
5	Columbia River Fish Mitigation	09/2020	09/2070	3.440%	35,551		
6	Construction (AS)	09/2020	09/2025	3.590%	6,000		
7	Corps	07/2020	09/2020	3.590%	33,900		
8	Corps	07/2020	07/2050	3.590%	9,100		
9	Corps	08/2020	08/2050	3.590%	43,000		
10	Corps	09/2020	09/2050	3.590%	45,000		
11	Fish and Wildlife	09/2020	09/2035	3.590%	47,000		
12	Technology (G)	09/2020	09/2025	3.590%	4,000		
13	<b>Totals:</b>				<b>432,932</b>		

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
1	2019	Albeni Falls	Historical	99	4.322%	4	-	-	4
2	2019	Boise	Historical	199	3.728%	7	-	-	7
3	2019	Bonneville Dam	Historical	32,739	4.378%	1,433	-	-	1,433
4	2019	Chief Joseph	Historical	28,269	4.435%	1,254	-	-	1,254
5	2019	Columbia Basin	Historical	12,765	3.516%	449	-	-	449
6	2019	Columbia River Fish Mitigation	Historical	1,191,246	3.865%	46,042	-	-	46,042
7	2019	Cougar	Historical	4,813	3.034%	146	-	-	146
8	2019	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
9	2019	Dworshak	Historical	2,390	4.381%	105	-	-	105
10	2019	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
11	2019	Hills Creek	Historical	154	3.404%	5	-	-	5
12	2019	Hungry Horse Dam	Historical	1,434	4.108%	59	-	-	59
13	2019	Ice Harbor	Historical	7,502	3.711%	278	-	-	278
14	2019	John Day	Historical	9,021	3.660%	330	-	-	330
15	2019	Libby	Historical	2,056	4.477%	92	-	-	92
16	2019	Little Goose	Historical	5,987	3.624%	217	-	-	217
17	2019	Lookout Dam	Historical	311	3.396%	11	-	-	11
18	2019	Lost Creek	Historical	7	3.748%	-	-	-	-
19	2019	Lower Granite	Historical	12,977	3.925%	509	-	-	509
20	2019	Lower Monument	Historical	5,244	3.829%	201	-	-	201
21	2019	Lower Snake Fish and Wildlife	Historical	5,206	3.521%	183	-	-	183
22	2019	McNary	Historical	6,869	4.069%	279	-	-	279
23	2019	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
24	2019	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
25	2019	The Dalles	Historical	4,010	4.548%	182	-	-	182
26	2019	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
27	2019	Bureau Direct	Historical	879,000	3.438%	30,223	-	96	30,319
28	2019	Bureau Direct	New	176,000	2.108%	3,710	-	-	3,710
29	2019	Conservation	Historical	349,000	2.885%	10,069	-	-	10,069
30	2019	Construction (AS)	Historical	40,350	1.934%	780	-	12	792
31	2019	Corps	Historical	397,200	2.269%	9,011	-	921	9,932
32	2019	Fish and Wildlife	Historical	327,000	3.542%	11,582	-	(48)	11,534
33	2019	Fish and Wildlife	New	26,000	1.926%	501	-	-	501
34	2019	Technology (G)	Historical	41,000	1.619%	664	-	-	664
35	2019	Float	Historical	-	-	(2,151)	-	-	(2,151)
36	<b>FY 2019</b>	<b>Subtotal:</b>		<b>3,589,714</b>		<b>116,854</b>	-	<b>981</b>	<b>117,836</b>
37	2020	Albeni Falls	Historical	99	4.322%	4	-	-	4
38	2020	Boise	Historical	135	3.187%	4	-	-	4
39	2020	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
40	2020	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
41	2020	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
42	2020	Columbia River Fish Mitigation	Historical	1,081,580	3.671%	39,699	-	-	39,699
43	2020	Cougar	Historical	4,813	3.034%	146	-	-	146
44	2020	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
45	2020	Dworshak	Historical	2,380	4.379%	104	-	-	104
46	2020	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
47	2020	Hills Creek	Historical	154	3.404%	5	-	-	5
48	2020	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
49	2020	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
50	2020	John Day	Historical	8,420	3.600%	303	-	-	303
51	2020	Libby	Historical	489	3.203%	16	-	-	16
52	2020	Little Goose	Historical	5,974	3.622%	216	-	-	216
53	2020	Lookout Dam	Historical	311	3.396%	11	-	-	11
54	2020	Lost Creek	Historical	7	3.748%	-	-	-	-
55	2020	Lower Granite	Historical	12,953	3.923%	508	-	-	508
56	2020	Lower Monument	Historical	4,949	3.788%	188	-	-	188
57	2020	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
58	2020	McNary	Historical	2,573	3.318%	85	-	-	85
59	2020	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
60	2020	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
61	2020	The Dalles	Historical	329	3.200%	11	-	-	11
62	2020	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
63	2020	Bureau Direct	Historical	910,000	3.371%	30,679	-	(1,430)	29,249
64	2020	Bureau Direct	New	80,000	-	-	-	358	358
65	2020	Conservation	Historical	349,000	2.885%	10,069	-	-	10,069
66	2020	Construction (AS)	Historical	35,100	1.727%	606	-	(103)	503
67	2020	Construction (AS)	New	6,000	-	-	-	-	-
68	2020	Corps	Historical	397,200	2.504%	9,947	-	-	9,947
69	2020	Corps	New	86,000	0.236%	203	-	184	387
70	2020	Fish and Wildlife	Historical	307,000	3.600%	11,051	-	-	11,051
71	2020	Technology (G)	Historical	41,000	1.619%	664	-	-	664
72	2020	Float	Historical	-	-	(1,225)	-	-	(1,225)
73	<b>FY 2020</b>	<b>Subtotal:</b>		<b>3,425,761</b>		<b>106,680</b>	-	<b>(990)</b>	<b>105,690</b>
74	2021	Albeni Falls	Historical	99	4.322%	4	-	-	4
75	2021	Boise	Historical	135	3.187%	4	-	-	4
76	2021	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
77	2021	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
78	2021	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
79	2021	Columbia River Fish Mitigation	Historical	1,117,131	3.663%	40,922	-	-	40,922
80	2021	Cougar	Historical	4,813	3.034%	146	-	-	146
81	2021	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
82	2021	Dworshak	Historical	2,380	4.379%	104	-	-	104
83	2021	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
84	2021	Hills Creek	Historical	154	3.404%	5	-	-	5
85	2021	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
86	2021	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
87	2021	John Day	Historical	8,420	3.600%	303	-	-	303
88	2021	Libby	Historical	489	3.203%	16	-	-	16
89	2021	Little Goose	Historical	5,974	3.622%	216	-	-	216
90	2021	Lookout Dam	Historical	311	3.396%	11	-	-	11
91	2021	Lost Creek	Historical	7	3.748%	-	-	-	-
92	2021	Lower Granite	Historical	12,953	3.923%	508	-	-	508
93	2021	Lower Monument	Historical	4,949	3.788%	188	-	-	188
94	2021	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
95	2021	McNary	Historical	2,573	3.318%	85	-	-	85
96	2021	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
97	2021	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
98	2021	The Dalles	Historical	329	3.200%	11	-	-	11
99	2021	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
100	2021	Bureau Direct	Historical	910,928	2.969%	27,043	-	(1,690)	25,353
101	2021	Conservation	Historical	349,000	2.885%	10,069	-	(80)	9,990
102	2021	Construction (AS)	Historical	23,000	2.421%	557	-	(34)	523
103	2021	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
104	2021	Fish and Wildlife	Historical	354,000	3.470%	12,283	-	(228)	12,055
105	2021	Replacements	New	197,900	2.010%	3,978	-	-	3,978
106	2021	Technology (G)	Historical	45,000	1.223%	550	-	(85)	466
107	2021	Float	Historical	-	-	(2,082)	-	-	(2,082)
108	<b>FY 2021</b>	<b>Subtotal:</b>		<b>3,624,141</b>		<b>111,736</b>	<b>-</b>	<b>(2,116)</b>	<b>109,619</b>
109	2022	Albeni Falls	Historical	99	4.322%	4	-	-	4
110	2022	Boise	Historical	135	3.187%	4	-	-	4
111	2022	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
112	2022	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
113	2022	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
114	2022	Columbia River Fish Mitigation	Historical	1,114,234	3.661%	40,792	-	-	40,792
115	2022	Cougar	Historical	4,813	3.034%	146	-	-	146
116	2022	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
117	2022	Dworshak	Historical	2,380	4.379%	104	-	-	104
118	2022	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
119	2022	Hills Creek	Historical	154	3.404%	5	-	-	5
120	2022	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
121	2022	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
122	2022	John Day	Historical	8,420	3.600%	303	-	-	303
123	2022	Libby	Historical	489	3.203%	16	-	-	16
124	2022	Little Goose	Historical	5,974	3.622%	216	-	-	216
125	2022	Lookout Dam	Historical	311	3.396%	11	-	-	11
126	2022	Lost Creek	Historical	7	3.748%	-	-	-	-
127	2022	Lower Granite	Historical	12,953	3.923%	508	-	-	508
128	2022	Lower Monument	Historical	4,949	3.788%	188	-	-	188
129	2022	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
130	2022	McNary	Historical	2,573	3.318%	85	-	-	85
131	2022	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
132	2022	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
133	2022	The Dalles	Historical	329	3.200%	11	-	-	11
134	2022	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
135	2022	Bureau Direct	Historical	644,000	3.157%	20,333	-	-	20,333
136	2022	Conservation	Historical	330,000	2.906%	9,591	-	(58)	9,532
137	2022	Construction (AS)	Historical	16,000	2.551%	408	-	(29)	379
138	2022	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
139	2022	Fish and Wildlife	Historical	334,000	3.541%	11,827	-	-	11,827
140	2022	Replacements	Historical	197,900	4.020%	7,956	-	-	7,956
141	2022	Replacements	New	197,900	2.010%	3,978	-	-	3,978
142	2022	Technology (G)	Historical	10,000	2.934%	293	-	(25)	269
143	2022	Float	Historical	-	-	(1,207)	-	-	(1,207)
144	<b>FY 2022</b>	<b>Subtotal:</b>		<b>3,471,217</b>		<b>112,385</b>	<b>-</b>	<b>(112)</b>	<b>112,273</b>
145	2023	Albeni Falls	Historical	99	4.322%	4	-	-	4
146	2023	Boise	Historical	135	3.187%	4	-	-	4
147	2023	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
148	2023	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
149	2023	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
150	2023	Columbia River Fish Mitigation	Historical	1,049,162	3.609%	37,864	-	-	37,864
151	2023	Cougar	Historical	4,813	3.034%	146	-	-	146
152	2023	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
153	2023	Dworshak	Historical	2,380	4.379%	104	-	-	104
154	2023	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
155	2023	Hills Creek	Historical	154	3.404%	5	-	-	5
156	2023	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
157	2023	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
158	2023	John Day	Historical	8,420	3.600%	303	-	-	303
159	2023	Libby	Historical	489	3.203%	16	-	-	16
160	2023	Little Goose	Historical	5,974	3.622%	216	-	-	216
161	2023	Lookout Dam	Historical	311	3.396%	11	-	-	11
162	2023	Lost Creek	Historical	7	3.748%	-	-	-	-
163	2023	Lower Granite	Historical	12,953	3.923%	508	-	-	508
164	2023	Lower Monument	Historical	4,949	3.788%	188	-	-	188
165	2023	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
166	2023	McNary	Historical	2,573	3.318%	85	-	-	85
167	2023	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
168	2023	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
169	2023	The Dalles	Historical	329	3.200%	11	-	-	11
170	2023	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
171	2023	Bureau Direct	Historical	625,000	3.219%	20,120	-	(456)	19,665
172	2023	Conservation	Historical	285,000	2.717%	7,742	-	(838)	6,904
173	2023	Construction (AS)	Historical	10,200	3.373%	344	-	-	344
174	2023	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
175	2023	Fish and Wildlife	Historical	303,000	3.584%	10,858	-	-	10,858
176	2023	Replacements	Historical	395,801	4.020%	15,911	-	-	15,911
177	2023	Replacements	New	197,900	2.010%	3,978	-	-	3,978
178	2023	Technology (G)	Historical	4,000	3.590%	144	-	-	144
179	2023	Float	Historical	-	-	(984)	-	-	(984)
180	<b>FY 2023</b>	<b>Subtotal:</b>		<b>3,497,245</b>		<b>114,393</b>	<b>-</b>	<b>(1,294)</b>	<b>113,099</b>
181	2024	Albeni Falls	Historical	99	4.322%	4	-	-	4
182	2024	Boise	Historical	135	3.187%	4	-	-	4
183	2024	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
184	2024	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
185	2024	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
186	2024	Columbia River Fish Mitigation	Historical	1,024,555	3.588%	36,757	-	-	36,757
187	2024	Cougar	Historical	4,813	3.034%	146	-	-	146
188	2024	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
189	2024	Dworshak	Historical	2,380	4.379%	104	-	-	104
190	2024	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
191	2024	Hills Creek	Historical	154	3.404%	5	-	-	5
192	2024	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
193	2024	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
194	2024	John Day	Historical	8,420	3.600%	303	-	-	303
195	2024	Libby	Historical	489	3.203%	16	-	-	16
196	2024	Little Goose	Historical	5,974	3.622%	216	-	-	216
197	2024	Lookout Dam	Historical	311	3.396%	11	-	-	11
198	2024	Lost Creek	Historical	7	3.748%	-	-	-	-
199	2024	Lower Granite	Historical	12,953	3.923%	508	-	-	508
200	2024	Lower Monument	Historical	4,949	3.788%	188	-	-	188
201	2024	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
202	2024	McNary	Historical	2,573	3.318%	85	-	-	85
203	2024	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
204	2024	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
205	2024	The Dalles	Historical	329	3.200%	11	-	-	11
206	2024	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
207	2024	Bureau Direct	Historical	625,000	3.129%	19,556	-	-	19,556
208	2024	Conservation	Historical	183,000	2.260%	4,136	-	(592)	3,543
209	2024	Construction (AS)	Historical	10,200	2.743%	280	-	(32)	248
210	2024	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
211	2024	Fish and Wildlife	Historical	303,000	3.601%	10,912	-	-	10,912
212	2024	Replacements	Historical	593,701	4.020%	23,867	-	-	23,867
213	2024	Replacements	New	197,900	2.010%	3,978	-	-	3,978
214	2024	Technology (G)	Historical	4,000	3.590%	144	-	-	144
215	2024	Float	Historical	-	-	(1,000)	-	-	(1,000)
216	<b>FY 2024</b>	<b>Subtotal:</b>		<b>3,568,538</b>		<b>117,044</b>	<b>-</b>	<b>(625)</b>	<b>116,420</b>
217	2025	Albeni Falls	Historical	99	4.322%	4	-	-	4
218	2025	Boise	Historical	135	3.187%	4	-	-	4
219	2025	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
220	2025	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
221	2025	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
222	2025	Columbia River Fish Mitigation	Historical	972,086	3.538%	34,395	-	-	34,395
223	2025	Cougar	Historical	4,813	3.034%	146	-	-	146
224	2025	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
225	2025	Dworshak	Historical	2,380	4.379%	104	-	-	104
226	2025	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
227	2025	Hills Creek	Historical	154	3.404%	5	-	-	5
228	2025	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
229	2025	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
230	2025	John Day	Historical	8,420	3.600%	303	-	-	303
231	2025	Libby	Historical	489	3.203%	16	-	-	16
232	2025	Little Goose	Historical	5,974	3.622%	216	-	-	216
233	2025	Lookout Dam	Historical	311	3.396%	11	-	-	11
234	2025	Lost Creek	Historical	7	3.748%	-	-	-	-
235	2025	Lower Granite	Historical	12,953	3.923%	508	-	-	508
236	2025	Lower Monument	Historical	4,949	3.788%	188	-	-	188
237	2025	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
238	2025	McNary	Historical	2,573	3.318%	85	-	-	85
239	2025	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
240	2025	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
241	2025	The Dalles	Historical	329	3.200%	11	-	-	11
242	2025	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
243	2025	Bureau Direct	Historical	625,000	3.129%	19,556	-	-	19,556
244	2025	Conservation	Historical	113,000	2.523%	2,851	-	(385)	2,465
245	2025	Construction (AS)	Historical	6,000	3.590%	215	-	-	215
246	2025	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
247	2025	Fish and Wildlife	Historical	303,000	3.601%	10,912	-	-	10,912
248	2025	Replacements	Historical	791,602	4.020%	31,822	-	-	31,822
249	2025	Replacements	New	197,900	2.010%	3,978	-	-	3,978
250	2025	Technology (G)	Historical	4,000	3.590%	144	-	-	144
251	2025	Float	Historical	-	-	(995)	-	-	(995)
252	<b>FY 2025</b>	<b>Subtotal:</b>		<b>3,639,770</b>		<b>121,294</b>	-	<b>(385)</b>	<b>120,908</b>
253	2026	Albeni Falls	Historical	99	4.322%	4	-	-	4
254	2026	Boise	Historical	135	3.187%	4	-	-	4
255	2026	Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
256	2026	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
257	2026	Columbia Basin	Historical	11,930	3.421%	408	-	-	408
258	2026	Columbia River Fish Mitigation	Historical	920,193	3.484%	32,060	-	-	32,060
259	2026	Cougar	Historical	4,813	3.034%	146	-	-	146
260	2026	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
261	2026	Dworshak	Historical	2,380	4.379%	104	-	-	104
262	2026	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
263	2026	Hills Creek	Historical	154	3.404%	5	-	-	5
264	2026	Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
265	2026	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
266	2026	John Day	Historical	8,420	3.600%	303	-	-	303
267	2026	Libby	Historical	489	3.203%	16	-	-	16
268	2026	Little Goose	Historical	5,974	3.622%	216	-	-	216
269	2026	Lookout Dam	Historical	311	3.396%	11	-	-	11
270	2026	Lost Creek	Historical	7	3.748%	-	-	-	-
271	2026	Lower Granite	Historical	12,953	3.923%	508	-	-	508
272	2026	Lower Monument	Historical	4,949	3.788%	188	-	-	188
273	2026	Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
274	2026	McNary	Historical	2,573	3.318%	85	-	-	85
275	2026	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
276	2026	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
277	2026	The Dalles	Historical	329	3.200%	11	-	-	11
278	2026	Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
279	2026	Bureau Direct	Historical	625,000	3.129%	19,556	-	-	19,556
280	2026	Conservation	Historical	49,000	2.697%	1,322	-	(45)	1,277
281	2026	Corps	Historical	494,300	2.717%	13,429	-	-	13,429
282	2026	Fish and Wildlife	Historical	303,000	3.126%	9,472	-	(580)	8,893
283	2026	Replacements	Historical	989,502	4.020%	39,778	-	-	39,778
284	2026	Replacements	New	197,900	2.010%	3,978	-	-	3,978
285	2026	Float	Historical	-	-	(1,001)	-	-	(1,001)
286	<b>FY 2026</b>	<b>Subtotal:</b>		<b>3,711,778</b>		<b>123,581</b>	-	<b>(624)</b>	<b>122,956</b>
287	2027	Albeni Falls	Historical	99	4.322%	4	-	-	4
288	2027	Boise	Historical	118	3.000%	4	-	-	4
289	2027	Bonneville Dam	Historical	15,502	3.888%	603	-	-	603
290	2027	Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
291	2027	Columbia Basin	Historical	8,605	3.024%	260	-	-	260
292	2027	Columbia River Fish Mitigation	Historical	896,464	3.457%	30,992	-	-	30,992
293	2027	Cougar	Historical	4,704	3.000%	141	-	-	141
294	2027	Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
295	2027	Dworshak	Historical	2,307	4.375%	101	-	-	101
296	2027	Green Peter/Foster	Historical	638	3.673%	23	-	-	23
297	2027	Hills Creek	Historical	154	3.404%	5	-	-	5
298	2027	Hungry Horse Dam	Historical	1,297	4.051%	53	-	-	53
299	2027	Ice Harbor	Historical	7,488	3.708%	278	-	-	278
300	2027	John Day	Historical	8,420	3.600%	303	-	-	303
301	2027	Libby	Historical	489	3.203%	16	-	-	16
302	2027	Little Goose	Historical	5,974	3.622%	216	-	-	216
303	2027	Lookout Dam	Historical	311	3.396%	11	-	-	11
304	2027	Lost Creek	Historical	7	3.748%	-	-	-	-

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
305		2027 Lower Granite	Historical	10,605	3.823%	405	-	-	405
306		2027 Lower Monument	Historical	2,617	3.266%	85	-	-	85
307		2027 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
308		2027 McNary	Historical	2,573	3.318%	85	-	-	85
309		2027 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
310		2027 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
311		2027 The Dalles	Historical	329	3.200%	11	-	-	11
312		2027 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
313		2027 Bureau Direct	Historical	625,000	3.129%	19,556	-	-	19,556
314		2027 Conservation	Historical	43,000	2.650%	1,140	-	-	1,140
315		2027 Corps	Historical	494,300	2.717%	13,429	-	-	13,429
316		2027 Fish and Wildlife	Historical	223,000	3.087%	6,883	-	(555)	6,328
317		2027 Replacements	Historical	1,187,403	4.020%	47,734	-	-	47,734
318		2027 Replacements	New	197,900	2.010%	3,978	-	-	3,978
319		2027 Float	Historical	-	-	(1,021)	-	-	(1,021)
320	<b>FY 2027</b>	<b>Subtotal:</b>		<b>3,789,041</b>		<b>127,193</b>	<b>-</b>	<b>(555)</b>	<b>126,638</b>
321		2028 Albeni Falls	Historical	99	4.322%	4	-	-	4
322		2028 Boise	Historical	118	3.000%	4	-	-	4
323		2028 Bonneville Dam	Historical	15,502	3.888%	603	-	-	603
324		2028 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
325		2028 Columbia Basin	Historical	8,605	3.024%	260	-	-	260
326		2028 Columbia River Fish Mitigation	Historical	843,951	3.400%	28,695	-	-	28,695
327		2028 Cougar	Historical	4,704	3.000%	141	-	-	141
328		2028 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
329		2028 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
330		2028 Hills Creek	Historical	154	3.404%	5	-	-	5
331		2028 Hungry Horse Dam	Historical	1,297	4.051%	53	-	-	53
332		2028 Ice Harbor	Historical	4,873	3.351%	163	-	-	163
333		2028 John Day	Historical	6,872	3.426%	235	-	-	235
334		2028 Libby	Historical	489	3.203%	16	-	-	16
335		2028 Little Goose	Historical	2,803	2.769%	78	-	-	78
336		2028 Lookout Dam	Historical	311	3.396%	11	-	-	11
337		2028 Lost Creek	Historical	7	3.748%	-	-	-	-
338		2028 Lower Granite	Historical	7,284	3.572%	260	-	-	260
339		2028 Lower Monument	Historical	2,617	3.266%	85	-	-	85
340		2028 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
341		2028 McNary	Historical	2,573	3.318%	85	-	-	85
342		2028 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
343		2028 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
344		2028 The Dalles	Historical	329	3.200%	11	-	-	11
345		2028 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
346		2028 Bureau Direct	Historical	625,000	3.129%	19,556	-	-	19,556
347		2028 Conservation	Historical	25,000	1.249%	312	-	(259)	53
348		2028 Corps	Historical	494,300	2.717%	13,429	-	-	13,429
349		2028 Fish and Wildlife	Historical	168,000	3.279%	5,510	-	-	5,510
350		2028 Replacements	Historical	1,385,303	4.020%	55,689	-	-	55,689
351		2028 Replacements	New	197,900	2.010%	3,978	-	-	3,978
352		2028 Float	Historical	-	-	(1,049)	-	-	(1,049)
353	<b>FY 2028</b>	<b>Subtotal:</b>		<b>3,848,466</b>		<b>130,055</b>	<b>-</b>	<b>(259)</b>	<b>129,796</b>
354		2029 Albeni Falls	Historical	42	4.249%	2	-	-	2
355		2029 Boise	Historical	118	3.000%	4	-	-	4
356		2029 Bonneville Dam	Historical	11,333	3.725%	422	-	-	422
357		2029 Chief Joseph	Historical	42	3.281%	1	-	-	1
358		2029 Columbia Basin	Historical	7,729	2.885%	223	-	-	223
359		2029 Columbia River Fish Mitigation	Historical	789,677	3.334%	26,325	-	-	26,325
360		2029 Cougar	Historical	4,583	2.964%	136	-	-	136
361		2029 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
362		2029 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
363		2029 Hills Creek	Historical	154	3.404%	5	-	-	5
364		2029 Hungry Horse Dam	Historical	518	3.751%	19	-	-	19
365		2029 Ice Harbor	Historical	4,666	3.311%	154	-	-	154
366		2029 John Day	Historical	6,517	3.381%	220	-	-	220
367		2029 Libby	Historical	449	3.109%	14	-	-	14
368		2029 Little Goose	Historical	2,773	2.753%	76	-	-	76
369		2029 Lookout Dam	Historical	311	3.396%	11	-	-	11
370		2029 Lost Creek	Historical	7	3.748%	-	-	-	-
371		2029 Lower Granite	Historical	6,128	3.444%	211	-	-	211
372		2029 Lower Monument	Historical	2,617	3.266%	85	-	-	85
373		2029 Lower Snake Fish and Wildlife	Historical	3,213	2.966%	95	-	-	95
374		2029 McNary	Historical	2,573	3.318%	85	-	-	85
375		2029 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
376		2029 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
377		2029 The Dalles	Historical	329	3.200%	11	-	-	11
378		2029 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
379		2029 Bureau Direct	Historical	625,000	3.028%	18,925	-	(456)	18,469
380		2029 Corps	Historical	494,300	2.717%	13,429	-	-	13,429

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
381	2029	Fish and Wildlife	Historical	142,000	2.679%	3,804	-	(496)	3,308
382	2029	Replacements	Historical	1,583,203	4.020%	63,645	-	-	63,645
383	2029	Replacements	New	197,900	2.010%	3,978	-	-	3,978
384	2029	Float	Historical	-	-	(2,516)	-	-	(2,516)
385	<b>FY 2029</b>	<b>Subtotal:</b>		<b>3,907,034</b>		<b>130,042</b>	-	<b>(953)</b>	<b>129,089</b>
386	2030	Boise	Historical	118	3.000%	4	-	-	4
387	2030	Bonneville Dam	Historical	11,332	3.725%	422	-	-	422
388	2030	Chief Joseph	Historical	42	3.281%	1	-	-	1
389	2030	Columbia Basin	Historical	6,006	2.636%	158	-	-	158
390	2030	Columbia River Fish Mitigation	Historical	601,720	3.136%	18,873	-	-	18,873
391	2030	Cougar	Historical	4,513	2.945%	133	-	-	133
392	2030	Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
393	2030	Green Peter/Foster	Historical	166	3.166%	5	-	-	5
394	2030	Hills Creek	Historical	142	3.375%	5	-	-	5
395	2030	Hungry Horse Dam	Historical	3	3.373%	-	-	-	-
396	2030	Ice Harbor	Historical	3,847	3.217%	124	-	-	124
397	2030	John Day	Historical	6,342	3.370%	214	-	-	214
398	2030	Libby	Historical	298	2.783%	8	-	-	8
399	2030	Little Goose	Historical	2,773	2.753%	76	-	-	76
400	2030	Lookout Dam	Historical	294	3.375%	10	-	-	10
401	2030	Lower Granite	Historical	3,475	3.115%	108	-	-	108
402	2030	Lower Monument	Historical	1,187	2.532%	30	-	-	30
403	2030	Lower Snake Fish and Wildlife	Historical	2,986	2.896%	86	-	-	86
404	2030	McNary	Historical	1,250	2.784%	35	-	-	35
405	2030	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
406	2030	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
407	2030	The Dalles	Historical	329	3.200%	11	-	-	11
408	2030	Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
409	2030	Bureau Direct	Historical	404,000	2.339%	9,448	-	(401)	9,047
410	2030	Corps	Historical	494,300	2.364%	11,686	-	(403)	11,282
411	2030	Fish and Wildlife	Historical	86,000	2.211%	1,901	-	-	1,901
412	2030	Replacements	Historical	1,781,104	4.020%	71,600	-	-	71,600
413	2030	Replacements	New	197,900	2.010%	3,978	-	-	3,978
414	2030	Float	Historical	-	-	(2,148)	-	-	(2,148)
415	<b>FY 2030</b>	<b>Subtotal:</b>		<b>3,630,322</b>		<b>117,421</b>	-	<b>(804)</b>	<b>116,616</b>
416	2031	Boise	Historical	118	3.000%	4	-	-	4
417	2031	Bonneville Dam	Historical	370	2.979%	11	-	-	11
418	2031	Chief Joseph	Historical	38	3.237%	1	-	-	1
419	2031	Columbia Basin	Historical	6,006	2.636%	158	-	-	158
420	2031	Columbia River Fish Mitigation	Historical	520,344	3.041%	15,821	-	-	15,821
421	2031	Cougar	Historical	4,231	2.891%	122	-	-	122
422	2031	Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
423	2031	Green Peter/Foster	Historical	166	3.166%	5	-	-	5
424	2031	Hills Creek	Historical	142	3.375%	5	-	-	5
425	2031	Hungry Horse Dam	Historical	3	3.373%	-	-	-	-
426	2031	Ice Harbor	Historical	3,847	3.217%	124	-	-	124
427	2031	John Day	Historical	6,342	3.370%	214	-	-	214
428	2031	Libby	Historical	298	2.783%	8	-	-	8
429	2031	Little Goose	Historical	2,773	2.753%	76	-	-	76
430	2031	Lookout Dam	Historical	294	3.375%	10	-	-	10
431	2031	Lower Granite	Historical	3,475	3.115%	108	-	-	108
432	2031	Lower Monument	Historical	1,187	2.532%	30	-	-	30
433	2031	Lower Snake Fish and Wildlife	Historical	2,864	2.860%	82	-	-	82
434	2031	McNary	Historical	1,250	2.784%	35	-	-	35
435	2031	Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
436	2031	RRP - Green Springs	Historical	3	3.317%	-	-	-	-
437	2031	The Dalles	Historical	329	3.200%	11	-	-	11
438	2031	Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
439	2031	Bureau Direct	Historical	280,008	2.446%	6,848	-	(188)	6,661
440	2031	Corps	Historical	357,145	2.508%	8,958	-	(585)	8,373
441	2031	Fish and Wildlife	Historical	30,928	1.550%	479	-	(17)	463
442	2031	Replacements	Historical	1,979,004	4.020%	79,556	-	-	79,556
443	2031	Replacements	New	197,900	2.010%	3,978	-	-	3,978
444	2031	Float	Historical	-	-	(2,220)	-	-	(2,220)
445	<b>FY 2031</b>	<b>Subtotal:</b>		<b>3,419,259</b>		<b>115,077</b>	-	<b>(790)</b>	<b>114,288</b>
446	2032	Boise	Historical	118	1.500%	2	-	-	2
447	2032	Bonneville Dam	Historical	268	2.875%	8	-	-	8
448	2032	Chief Joseph	Historical	10	2.876%	-	-	-	-
449	2032	Columbia Basin	Historical	5,995	2.623%	157	-	-	157
450	2032	Columbia River Fish Mitigation	Historical	260,457	2.528%	6,584	-	-	6,584
451	2032	Cougar	Historical	4,092	2.875%	118	-	-	118
452	2032	Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
453	2032	Green Peter/Foster	Historical	70	2.999%	2	-	-	2
454	2032	Ice Harbor	Historical	558	3.000%	17	-	-	17
455	2032	John Day	Historical	17	2.873%	1	-	-	1
456	2032	Libby	Historical	282	1.375%	4	-	-	4

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
457	2032	Little Goose	Historical	2,773	1.411%	39	-	-	39
458	2032	Lower Granite	Historical	1,878	3.000%	56	-	-	56
459	2032	Lower Monument	Historical	1,098	2.464%	27	-	-	27
460	2032	Lower Snake Fish and Wildlife	Historical	2,864	2.088%	60	-	-	60
461	2032	McNary	Historical	1,238	2.779%	34	-	-	34
462	2032	Minidoka/Palisades	Historical	341	2.726%	9	-	-	9
463	2032	RRP - Green Springs	Historical	-	2.887%	-	-	-	-
464	2032	The Dalles	Historical	28	1.956%	1	-	-	1
465	2032	Yakima Chandler/Kenniwick	Historical	49	1.374%	1	-	-	1
466	2032	Bureau Direct	Historical	236,305	2.022%	4,777	-	(728)	4,049
467	2032	Corps	Historical	276,178	2.268%	6,265	-	(1,126)	5,139
468	2032	Replacements	Historical	2,176,905	4.020%	87,512	-	-	87,512
469	2032	Replacements	New	197,900	2.010%	3,978	-	-	3,978
470	2032	Float	Historical	-	-	(2,445)	-	-	(2,445)
471	<b>FY 2032</b>	<b>Subtotal:</b>		<b>3,169,983</b>		<b>107,221</b>		<b>(1,854)</b>	<b>105,367</b>
472	2033	Columbia Basin	Historical	2,865	1.187%	34	-	-	34
473	2033	Columbia River Fish Mitigation	Historical	57,719	1.188%	685	-	-	685
474	2033	Cougar	Historical	2	1.214%	-	-	-	-
475	2033	Lower Monument	Historical	942	1.188%	11	-	-	11
476	2033	McNary	Historical	239	1.188%	3	-	-	3
477	2033	Minidoka/Palisades	Historical	127	1.187%	2	-	-	2
478	2033	The Dalles	Historical	10	1.191%	-	-	-	-
479	2033	Bureau Direct	Historical	107,138	1.321%	1,415	-	(186)	1,229
480	2033	Corps	Historical	111,289	1.437%	1,599	-	(158)	1,441
481	2033	Replacements	Historical	2,374,805	3.832%	91,005	-	-	91,005
482	2033	Replacements	New	197,900	2.010%	3,978	-	-	3,978
483	2033	Float	Historical	-	-	(2,479)	-	-	(2,479)
484	<b>FY 2033</b>	<b>Subtotal:</b>		<b>2,853,035</b>		<b>96,253</b>		<b>(344)</b>	<b>95,909</b>
485	2034	Replacements	Historical	2,350,696	3.576%	84,052	-	-	84,052
486	2034	Replacements	New	197,900	2.010%	3,978	-	-	3,978
487	2034	Float	Historical	-	-	(2,511)	-	-	(2,511)
488	<b>FY 2034</b>	<b>Subtotal:</b>		<b>2,548,596</b>		<b>85,519</b>			<b>85,519</b>
489	2035	Replacements	Historical	2,028,884	3.473%	70,472	-	-	70,472
490	2035	Replacements	New	197,900	2.010%	3,978	-	-	3,978
491	2035	Float	Historical	-	-	(2,657)	-	-	(2,657)
492	<b>FY 2035</b>	<b>Subtotal:</b>		<b>2,226,784</b>		<b>71,793</b>			<b>71,793</b>
493	2036	Replacements	Historical	1,675,090	3.348%	56,086	-	-	56,086
494	2036	Replacements	New	197,900	2.010%	3,978	-	-	3,978
495	2036	Float	Historical	-	-	(2,756)	-	-	(2,756)
496	<b>FY 2036</b>	<b>Subtotal:</b>		<b>1,872,991</b>		<b>57,308</b>			<b>57,308</b>
497	2037	Replacements	Historical	1,313,171	3.113%	40,880	-	-	40,880
498	2037	Replacements	New	197,900	2.010%	3,978	-	-	3,978
499	2037	Float	Historical	-	-	(2,807)	-	-	(2,807)
500	<b>FY 2037</b>	<b>Subtotal:</b>		<b>1,511,071</b>		<b>42,051</b>			<b>42,051</b>
501	2038	Replacements	Historical	918,580	2.585%	23,748	-	-	23,748
502	2038	Replacements	New	197,900	2.010%	3,978	-	-	3,978
503	2038	Float	Historical	-	-	(2,979)	-	-	(2,979)
504	<b>FY 2038</b>	<b>Subtotal:</b>		<b>1,116,480</b>		<b>24,746</b>			<b>24,746</b>
505	2039	Replacements	Historical	460,791	2.010%	9,262	-	-	9,262
506	2039	Replacements	New	197,900	2.010%	3,978	-	-	3,978
507	2039	Float	Historical	-	-	(3,402)	-	-	(3,402)
508	<b>FY 2039</b>	<b>Subtotal:</b>		<b>658,692</b>		<b>9,838</b>			<b>9,838</b>
509	2040	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
510	2040	Replacements	New	197,900	2.010%	3,978	-	-	3,978
511	2040	Float	Historical	-	-	(3,439)	-	-	(3,439)
512	<b>FY 2040</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>4,517</b>			<b>4,517</b>
513	2041	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
514	2041	Replacements	New	197,900	2.010%	3,978	-	-	3,978
515	2041	Float	Historical	-	-	(3,473)	-	-	(3,473)
516	<b>FY 2041</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>4,483</b>			<b>4,483</b>
517	2042	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
518	2042	Replacements	New	197,900	2.010%	3,978	-	-	3,978
519	2042	Float	Historical	-	-	(3,476)	-	-	(3,476)
520	<b>FY 2042</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>4,480</b>			<b>4,480</b>
521	2043	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
522	2043	Replacements	New	197,900	2.010%	3,978	-	-	3,978
523	2043	Float	Historical	-	-	(3,479)	-	-	(3,479)
524	<b>FY 2043</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>4,477</b>			<b>4,477</b>
525	2044	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
526	2044	Replacements	New	197,900	2.010%	3,978	-	-	3,978
527	2044	Float	Historical	-	-	(2,962)	-	-	(2,962)
528	<b>FY 2044</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>4,994</b>			<b>4,994</b>
529	2045	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
530	2045	Replacements	New	197,900	2.010%	3,978	-	-	3,978
531	2045	Float	Historical	-	-	(1,416)	-	-	(1,416)
532	<b>FY 2045</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>			<b>6,540</b>
533	2046	Replacements	Historical	197,900	2.010%	3,978	-	-	3,978



**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
534		2046 Replacements	New	197,900	2.010%	3,978	-	-	3,978
535		2046 Float	Historical	-	-	(1,416)	-	-	(1,416)
536	<b>FY 2046</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
537		2047 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
538		2047 Replacements	New	197,900	2.010%	3,978	-	-	3,978
539		2047 Float	Historical	-	-	(1,416)	-	-	(1,416)
540	<b>FY 2047</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
541		2048 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
542		2048 Replacements	New	197,900	2.010%	3,978	-	-	3,978
543		2048 Float	Historical	-	-	(1,416)	-	-	(1,416)
544	<b>FY 2048</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
545		2049 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
546		2049 Replacements	New	197,900	2.010%	3,978	-	-	3,978
547		2049 Float	Historical	-	-	(1,416)	-	-	(1,416)
548	<b>FY 2049</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
549		2050 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
550		2050 Replacements	New	197,900	2.010%	3,978	-	-	3,978
551		2050 Float	Historical	-	-	(1,416)	-	-	(1,416)
552	<b>FY 2050</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
553		2051 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
554		2051 Replacements	New	197,900	2.010%	3,978	-	-	3,978
555		2051 Float	Historical	-	-	(1,416)	-	-	(1,416)
556	<b>FY 2051</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
557		2052 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
558		2052 Replacements	New	197,900	2.010%	3,978	-	-	3,978
559		2052 Float	Historical	-	-	(1,416)	-	-	(1,416)
560	<b>FY 2052</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
561		2053 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
562		2053 Replacements	New	197,900	2.010%	3,978	-	-	3,978
563		2053 Float	Historical	-	-	(1,416)	-	-	(1,416)
564	<b>FY 2053</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
565		2054 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
566		2054 Replacements	New	197,900	2.010%	3,978	-	-	3,978
567		2054 Float	Historical	-	-	(1,416)	-	-	(1,416)
568	<b>FY 2054</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
569		2055 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
570		2055 Replacements	New	197,900	2.010%	3,978	-	-	3,978
571		2055 Float	Historical	-	-	(1,416)	-	-	(1,416)
572	<b>FY 2055</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
573		2056 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
574		2056 Replacements	New	197,900	2.010%	3,978	-	-	3,978
575		2056 Float	Historical	-	-	(1,416)	-	-	(1,416)
576	<b>FY 2056</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
577		2057 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
578		2057 Replacements	New	197,900	2.010%	3,978	-	-	3,978
579		2057 Float	Historical	-	-	(1,416)	-	-	(1,416)
580	<b>FY 2057</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
581		2058 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
582		2058 Replacements	New	197,900	2.010%	3,978	-	-	3,978
583		2058 Float	Historical	-	-	(1,416)	-	-	(1,416)
584	<b>FY 2058</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
585		2059 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
586		2059 Replacements	New	197,900	2.010%	3,978	-	-	3,978
587		2059 Float	Historical	-	-	(1,416)	-	-	(1,416)
588	<b>FY 2059</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
589		2060 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
590		2060 Replacements	New	197,900	2.010%	3,978	-	-	3,978
591		2060 Float	Historical	-	-	(1,416)	-	-	(1,416)
592	<b>FY 2060</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
593		2061 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
594		2061 Replacements	New	197,900	2.010%	3,978	-	-	3,978
595		2061 Float	Historical	-	-	(1,416)	-	-	(1,416)
596	<b>FY 2061</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
597		2062 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
598		2062 Replacements	New	197,900	2.010%	3,978	-	-	3,978
599		2062 Float	Historical	-	-	(1,416)	-	-	(1,416)
600	<b>FY 2062</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
601		2063 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
602		2063 Replacements	New	197,900	2.010%	3,978	-	-	3,978
603		2063 Float	Historical	-	-	(1,416)	-	-	(1,416)
604	<b>FY 2063</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
605		2064 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
606		2064 Replacements	New	197,900	2.010%	3,978	-	-	3,978
607		2064 Float	Historical	-	-	(1,416)	-	-	(1,416)
608	<b>FY 2064</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
609		2065 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
610		2065 Replacements	New	197,900	2.010%	3,978	-	-	3,978

**TABLE 11C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

	A	B	D	E	F	G	H	I	J
	Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
611		2065 Float	Historical	-	-	(1,416)	-	-	(1,416)
612	<b>FY 2065</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
613		2066 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
614		2066 Replacements	New	197,900	2.010%	3,978	-	-	3,978
615		2066 Float	Historical	-	-	(1,416)	-	-	(1,416)
616	<b>FY 2066</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
617		2067 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
618		2067 Replacements	New	197,900	2.010%	3,978	-	-	3,978
619		2067 Float	Historical	-	-	(1,416)	-	-	(1,416)
620	<b>FY 2067</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
621		2068 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
622		2068 Replacements	New	197,900	2.010%	3,978	-	-	3,978
623		2068 Float	Historical	-	-	(1,416)	-	-	(1,416)
624	<b>FY 2068</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
625		2069 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
626		2069 Replacements	New	197,900	2.010%	3,978	-	-	3,978
627		2069 Float	Historical	-	-	(1,416)	-	-	(1,416)
628	<b>FY 2069</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
629		2070 Replacements	Historical	197,900	2.010%	3,978	-	-	3,978
630		2070 Replacements	New	197,900	2.010%	3,978	-	-	3,978
631		2070 Float	Historical	-	-	(1,416)	-	-	(1,416)
632	<b>FY 2070</b>	<b>Subtotal:</b>		<b>395,801</b>		<b>6,540</b>	-	-	<b>6,540</b>
633		<b>Grand Total:</b>		<b>\$75,349,743</b>		<b>\$2,231,465</b>	-	<b>(\$10,724)</b>	<b>\$2,220,741</b>

**TABLE 11D:**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
1	2019	Construction (AS)	-	11/30/2012	11/30/2018	5,250	5,250	1.109%					5,250		
2	2019	Fish and Wildlife	-	8/31/2010	8/31/2019	20,000	20,000	2.646%					20,000		
3	2019	Bureau Direct	-	12/31/2018	9/30/2019	13,000	13,000	2.568%					13,000		
4	2019	Bureau Direct	-	12/31/2018	9/30/2019	14,000	14,000	2.568%					14,000		
5	2019	Bureau Direct	-	12/31/2018	9/30/2019	21,000	21,000	2.568%					21,000		
6	2019	Bureau Direct	-	12/31/2018	9/30/2019	38,000	38,000	2.568%					38,000		
7	2019	Fish and Wildlife	-	12/31/2018	9/30/2019	26,000	26,000	2.568%					26,000		
8	2019	Bureau Direct	-	1/31/2019	9/30/2019	10,000	10,000	2.521%					10,000		
9	2019	Bureau Direct	-	10/31/2018	9/30/2019	24,000	24,000	2.653%					24,000		
10	2019	Bureau Direct	-	9/30/2009	9/30/2019	25,000	25,000	3.699%					25,000		
11	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	366,395	4.500%					145,728		
12	2019	John Day	Corps of Engineers	9/30/2006	9/30/2056	601	601	4.500%					601		
13	2019	Lower Monument	Corps of Engineers	9/30/2006	9/30/2056	285	285	4.500%					285		
14	2019	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2006	9/30/2056	379	379	4.500%					379		
15	2019	The Dalles	Corps of Engineers	9/30/2006	9/30/2056	2,030	2,030	4.500%					2,030		
16	2019	McNary	Corps of Engineers	9/30/2006	9/30/2056	4,080	4,080	4.500%					4,080		
17	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2007	9/30/2057	53,525	14,765	5.000%					14,765		
18	2019	Boise	Bureau of Reclamation	9/30/2008	9/30/2058	64	64	4.875%					64		
19	2019	Bonneville Dam	Corps of Engineers	9/30/2008	9/30/2058	14,609	14,609	4.875%					14,609		
20	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2008	9/30/2058	36,554	36,554	4.875%					36,554		
21	2019	Dworshak	Corps of Engineers	9/30/2008	9/30/2058	10	10	4.875%					10		
22	2019	Hungry Horse Dam	Bureau of Reclamation	9/30/2008	9/30/2058	76	76	4.875%					76		
23	2019	Ice Harbor	Corps of Engineers	9/30/2008	9/30/2058	14	14	4.875%					14		
24	2019	Libby	Corps of Engineers	9/30/2008	9/30/2058	1,567	1,567	4.875%					1,567		
25	2019	Little Goose	Corps of Engineers	9/30/2008	9/30/2058	13	13	4.875%					13		
26	2019	Lower Granite	Corps of Engineers	9/30/2008	9/30/2058	24	24	4.875%					24		
27	2019	Lower Monument	Corps of Engineers	9/30/2008	9/30/2058	9	9	4.875%					9		
28	2019	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2008	9/30/2058	74	74	4.875%					74		
29	2019	McNary	Corps of Engineers	9/30/2008	9/30/2058	215	215	4.875%					215		
30	2019	The Dalles	Corps of Engineers	9/30/2008	9/30/2058	1,651	1,651	4.875%					1,651		
31	2019	Chief Joseph	Corps of Engineers	9/30/2008	9/30/2058	3,500	3,500	4.875%					3,500		
32	2019	Columbia Basin	Bureau of Reclamation	9/30/2008	9/30/2058	835	835	4.875%					835		
33		<b>FY 2019 Subtotal:</b>	-	-	-	<b>682,760</b>	<b>644,000</b>	-					<b>423,334</b>		
34	2020	Construction (AS)	-	10/31/2013	10/31/2019	4,200	4,200	2.039%					4,200		
35	2020	Construction (AS)	-	10/31/2013	10/31/2019	5,000	5,000	2.039%					5,000		
36	2020	Bureau Direct	-	10/31/2009	10/31/2019	20,000	20,000	3.842%					20,000		
37	2020	Bureau Direct	-	11/30/2009	11/30/2019	7,000	7,000	3.637%					7,000		
38	2020	Bureau Direct	-	12/31/2009	12/31/2019	13,000	13,000	4.194%					13,000		
39	2020	Construction (AS)	-	1/31/2014	1/31/2020	1,750	1,750	2.183%					1,750		
40	2020	Construction (AS)	-	1/31/2014	1/31/2020	2,000	2,000	2.183%					2,000		
41	2020	Bureau Direct	-	3/31/2010	3/31/2020	30,000	30,000	4.083%					30,000		
42	2020	Construction (AS)	-	4/30/2014	3/31/2020	1,400	1,400	2.455%					1,400		
43	2020	Construction (AS)	-	4/30/2014	3/31/2020	2,000	2,000	2.455%					2,000		
44	2020	Construction (AS)	-	5/31/2014	4/30/2020	700	700	2.497%					700		
45	2020	Construction (AS)	-	7/31/2014	7/31/2020	1,050	1,050	2.497%					1,050		
46	2020	Bureau Direct	-	11/20/2013	9/30/2020	51,000	51,000	2.473%					51,000		
47	2020	Corps	-	7/31/2020	9/30/2020	24,000	33,900	3.590%					33,900		
48	2020	Bureau Direct	-	6/30/2009	6/30/2031	25,000	25,000	5.192%					72		

**TABLE 11D:  
Application of Amortization  
October 1, 2018 - September 30, 2021 Cost Evaluation Period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
49	2020	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	220,666	4.500%	4.500%						
50	<b>FY 2020 Subtotal:</b>		-	-	-	<b>554,495</b>	<b>418,666</b>	-					<b>173,072</b>	<b>13</b>	
51	2021	Construction (AS)	-	11/30/2014	11/30/2020	2,100	2,100	1.809%	1.809%				2,100		
52	2021	Construction (AS)	-	12/31/2014	12/31/2020	1,050	1,050	1.922%	1.922%				1,050		
53	2021	Technology (G)	-	1/31/2015	1/31/2021	35,000	35,000	1.469%	1.469%				35,000		
54	2021	Bureau Direct	-	1/31/2009	1/31/2021	25,000	25,000	3.999%	3.999%				25,000		
55	2021	Construction (AS)	-	2/28/2015	2/28/2021	1,750	1,750	1.761%	1.761%				1,750		
56	2021	Construction (AS)	-	5/31/2015	5/31/2021	2,100	2,100	1.898%	1.898%				2,100		
57	2021	Conservation	-	5/31/2015	5/31/2021	5,000	5,000	1.898%	1.898%				5,000		
58	2021	Conservation	-	7/31/2015	7/31/2021	14,000	14,000	2.067%	2.067%				14,000		
59	2021	Bureau Direct	-	11/20/2013	9/30/2021	50,000	50,000	2.812%	2.812%				50,000		
60	2021	Bureau Direct	-	9/30/2010	9/30/2021	22,000	22,000	2.883%	2.883%				22,000		
61	2021	Fish and Wildlife	-	6/30/2009	6/30/2024	20,000	20,000	4.556%	4.556%				20,000	537	
62	2021	Bureau Direct	-	6/22/2011	6/30/2036	30,000	30,000	4.629%	4.629%				30,000	2,506	
63	2021	Bureau Direct	-	6/22/2011	6/30/2038	30,000	30,000	4.700%	4.700%				30,000	2,885	
64	2021	Bureau Direct	-	1/31/2011	1/31/2039	35,000	35,000	5.040%	5.040%				35,000	4,920	
65	2021	Bureau Direct	-	6/30/2009	6/30/2039	25,000	24,928	5.192%	5.192%				24,928	4,068	
66	2021	Bureau Direct	-	2/28/2011	2/28/2040	50,000	50,000	4.995%	4.995%				50,000	6,762	
67	2021	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	220,666	4.500%	4.500%				2,896		
68	<b>FY 2021 Subtotal:</b>		-	-	-	<b>714,395</b>	<b>568,594</b>	-					<b>350,824</b>	<b>21,677</b>	
69	2022	Construction (AS)	-	10/31/2015	10/31/2021	2,800	2,800	1.942%	1.942%				2,800		
70	2022	Conservation	-	12/31/2013	12/31/2021	6,000	6,000	3.142%	3.142%				6,000		
71	2022	Construction (AS)	-	2/29/2016	2/28/2022	3,000	3,000	2.476%	2.476%				3,000		
72	2022	Technology (G)	-	10/31/2015	7/31/2022	6,000	6,000	2.497%	2.497%				6,000		
73	2022	Conservation	-	8/31/2015	8/31/2022	6,000	6,000	2.233%	2.233%				6,000		
74	2022	Conservation	-	1/31/2018	9/30/2022	9,000	9,000	2.513%	2.513%				9,000		
75	2022	Conservation	-	1/31/2018	9/30/2022	20,000	20,000	2.513%	2.513%				20,000		
76	2022	Bureau Direct	-	11/20/2013	9/30/2022	19,000	19,000	3.125%	3.125%				19,000		
77	2022	Fish and Wildlife	-	11/20/2013	9/30/2022	31,000	31,000	3.125%	3.125%				31,000		
78	2022	Conservation	-	9/30/2015	9/30/2022	4,000	4,000	2.062%	2.062%				4,000		
79	2022	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	217,770	4.500%	4.500%				65,072		
80	<b>FY 2022 Subtotal:</b>		-	-	-	<b>473,195</b>	<b>324,570</b>	-					<b>171,872</b>		
81	2023	Conservation	-	1/31/2011	1/31/2023	40,000	40,000	4.046%	4.046%				40,000		
82	2023	Conservation	-	4/30/2011	4/30/2023	35,000	35,000	3.932%	3.932%				35,000		
83	2023	Conservation	-	11/20/2013	9/30/2023	27,000	27,000	3.375%	3.375%				27,000		

**TABLE 11D:  
Application of Amortization  
October 1, 2018 - September 30, 2021 Cost Evaluation Period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
84	2023	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	152,698	4.500%	4.500%						24,607
85	<b>FY 2023 Subtotal:</b>		-	-	-	<b>468,395</b>	<b>254,698</b>	-							<b>126,607</b>
86	2024	Construction (AS)	-	9/28/2018	12/31/2023	4,200	4,200	3.064%	3.064%				4,200		
87	2024	Conservation	-	12/31/2013	12/31/2023	55,000	55,000	2.530%	2.530%				55,000		
88	2024	Conservation	-	5/31/2014	4/30/2024	15,000	15,000	2.497%	2.497%				15,000		
89	2024	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	128,091	4.500%	4.500%						52,469
90	<b>FY 2024 Subtotal:</b>		-	-	-	<b>440,595</b>	<b>202,291</b>	-							<b>126,669</b>
91	2025	Conservation	-	6/30/2014	10/31/2024	5,000	5,000	2.497%	2.497%				5,000		
92	2025	Conservation	-	10/31/2014	12/31/2024	10,000	10,000	2.530%	2.530%				10,000		
93	2025	Conservation	-	5/31/2014	4/30/2025	3,000	3,000	2.497%	2.497%				3,000		
94	2025	Conservation	-	4/30/2014	6/30/2025	30,000	30,000	2.530%	2.530%				30,000		
95	2025	Conservation	-	7/31/2014	7/31/2025	12,000	12,000	2.497%	2.497%				12,000		
96	2025	Conservation	-	8/31/2014	9/30/2025	4,000	4,000	2.455%	2.455%				4,000		
97	2025	Construction (AS)	-	9/30/2020	9/30/2025	3,850	6,000	3.590%	3.590%				6,000		
98	2025	Technology (G)	-	9/30/2020	9/30/2025	2,000	4,000	3.590%	3.590%				4,000		
99	2025	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	75,622	4.500%	4.500%						51,892
100	<b>FY 2025 Subtotal:</b>		-	-	-	<b>436,245</b>	<b>149,622</b>	-							<b>125,892</b>
101	2026	Conservation	-	10/31/2013	10/31/2025	34,000	1,000	3.568%	3.568%				1,000		
102	2026	Conservation	-	1/31/2014	1/31/2026	5,000	5,000	3.621%	3.621%				5,000		
103	2026	Fish and Wildlife	-	1/31/2011	1/31/2026	50,000	50,000	4.440%	4.440%				50,000		
104	2026	Fish and Wildlife	-	2/28/2011	2/28/2026	15,000	15,000	4.398%	4.398%				15,000		
105	2026	Fish and Wildlife	-	6/22/2011	6/30/2026	15,000	15,000	4.205%	4.205%				15,000		
106	2026	Boise	Bureau of Reclamation	9/30/2006	9/30/2056	15	15	4.500%	4.500%						15
107	2026	Bonneville Dam	Corps of Engineers	9/30/2006	9/30/2056	2,628	2,628	4.500%	4.500%				2,628		
108	2026	Columbia Basin	Bureau of Reclamation	9/30/2006	9/30/2056	1,987	1,987	4.500%	4.500%				1,987		
109	2026	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	23,729	4.500%	4.500%						23,729
110	2026	Cougar	Corps of Engineers	9/30/2006	9/30/2056	109	109	4.500%	4.500%				109		
111	2026	Dworshak	Corps of Engineers	9/30/2006	9/30/2056	73	73	4.500%	4.500%				73		
112	2026	Boise	Bureau of Reclamation	9/30/2009	9/30/2059	2	2	4.375%	4.375%				2		
113	2026	Columbia Basin	Bureau of Reclamation	9/30/2009	9/30/2059	1,338	1,338	4.375%	4.375%				1,338		
114	2026	Hungry Horse Dam	Bureau of Reclamation	9/30/2009	9/30/2059	60	60	4.375%	4.375%				60		
115	2026	Lower Granite	Corps of Engineers	9/30/2009	9/30/2059	5,669	5,669	4.375%	4.375%				2,348		
116	2026	Lower Monument	Corps of Engineers	9/30/2009	9/30/2059	2,332	2,332	4.375%	4.375%				2,332		
117	2026	Yakima Chandler/Kenniwick	Bureau of Reclamation	9/30/2009	9/30/2059	15	15	4.375%	4.375%				15		
118	<b>FY 2026 Subtotal:</b>		-	-	-	<b>499,624</b>	<b>123,958</b>	-							<b>120,637</b>
119	2027	Conservation	-	12/31/2014	12/31/2023	7,000	7,000	2.403%	3.680%	Global	12/31/2023	12/31/2026	3.680%		7,000
120	2027	Conservation	-	4/30/2015	4/30/2024	5,000	5,000	2.269%	3.680%	Global	4/30/2024	4/30/2027	3.680%		5,000
121	2027	Fish and Wildlife	-	10/31/2013	12/31/2026	28,000	28,000	3.717%	3.717%				28,000		
122	2027	Conservation	-	11/30/2014	3/31/2027	6,000	6,000	2.455%	2.455%				6,000		
123	2027	Fish and Wildlife	-	5/31/2014	4/30/2027	11,000	11,000	2.497%	2.497%				11,000		
124	2027	Fish and Wildlife	-	11/30/2013	5/31/2027	5,000	5,000	2.544%	2.544%				5,000		
125	2027	Fish and Wildlife	-	10/31/2013	5/31/2027	11,000	11,000	3.762%	3.762%				11,000		
126	2027	Columbia River Fish Mitigation	Corps of Engineers	9/30/2009	9/30/2059	103,203	103,203	4.375%	4.375%						52,513
127	2027	Dworshak	Corps of Engineers	9/30/2009	9/30/2059	2,307	2,307	4.375%	4.375%				2,307		
128	2027	Ice Harbor	Corps of Engineers	9/30/2009	9/30/2059	2,615	2,615	4.375%	4.375%				2,615		
129	2027	John Day	Corps of Engineers	9/30/2009	9/30/2059	1,548	1,548	4.375%	4.375%				1,548		
130	2027	Little Goose	Corps of Engineers	9/30/2009	9/30/2059	3,171	3,171	4.375%	4.375%				3,171		
131	2027	Lower Granite	Corps of Engineers	9/30/2009	9/30/2059	3,321	3,321	4.375%	4.375%				3,321		

**TABLE 11D:  
Application of Amortization  
October 1, 2018 - September 30, 2021 Cost Evaluation Period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
132	<b>FY 2027 Subtotal:</b>	-	-	-	<b>191,513</b>	<b>189,165</b>	-						<b>138,475</b>		
133	2028 Fish and Wildlife	-	11/20/2013	9/30/2023	23,000	23,000	3.375%	3.610%	Global	9/30/2023	9/30/2028	3.610%	23,000		
134	2028 Conservation	-	10/31/2015	10/31/2027	25,000	25,000	2.497%	2.497%					25,000		
135	2028 Fish and Wildlife	-	3/31/2015	3/31/2028	3,000	3,000	2.511%	2.511%					3,000		
136	2028 Albeni Falls	Corps of Engineers	9/30/2009	9/30/2059	57	57	4.375%	4.375%					57		
137	2028 Bonneville Dam	Corps of Engineers	9/30/2009	9/30/2059	2,744	2,744	4.375%	4.375%					2,744		
138	2028 Chief Joseph	Corps of Engineers	9/30/2009	9/30/2059	24,727	24,727	4.375%	4.375%					24,727		
139	2028 Columbia River Fish Mitigation	Corps of Engineers	9/30/2009	9/30/2059	103,203	50,690	4.375%	4.375%					50,690		
140	2028 Cougar	Corps of Engineers	9/30/2009	9/30/2059	121	121	4.375%	4.375%					121		
141	2028 Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2009	9/30/2059	1,540	1,540	4.375%	4.375%					1,540		
142	2028 Little Goose	Corps of Engineers	9/30/2010	9/30/2060	30	30	4.250%	4.250%					30		
143	2028 Lower Granite	Corps of Engineers	9/30/2010	9/30/2060	1,156	1,156	4.250%	4.250%					1,156		
144	2028 Bonneville Dam	Corps of Engineers	9/30/2010	9/30/2060	1,425	1,425	4.250%	4.250%					1,425		
145	2028 Columbia Basin	Bureau of Reclamation	9/30/2010	9/30/2060	877	877	4.250%	4.250%					877		
146	2028 Columbia River Fish Mitigation	Corps of Engineers	9/30/2010	9/30/2060	56,832	56,832	4.250%	4.250%					3,584		
147	2028 Hungry Horse Dam	Bureau of Reclamation	9/30/2010	9/30/2060	779	779	4.250%	4.250%					779		
148	2028 Ice Harbor	Corps of Engineers	9/30/2010	9/30/2060	207	207	4.250%	4.250%					207		
149	2028 John Day	Corps of Engineers	9/30/2010	9/30/2060	356	356	4.250%	4.250%					356		
150	2028 Libby	Corps of Engineers	9/30/2010	9/30/2060	40	40	4.250%	4.250%					40		
151	<b>FY 2028 Subtotal:</b>	-	-	-	<b>245,094</b>	<b>192,581</b>	-						<b>139,333</b>		
152	2029 Bureau Direct	-	4/30/2010	4/30/2020	18,000	18,000	3.973%	3.720%	Global	4/30/2020	4/30/2029	3.720%	18,000		
153	2029 Bureau Direct	-	5/31/2010	5/31/2020	15,000	15,000	3.574%	3.720%	Global	5/31/2020	5/31/2029	3.720%	15,000		
154	2029 Bureau Direct	-	6/30/2010	6/30/2020	10,000	10,000	3.243%	3.720%	Global	6/30/2020	6/30/2029	3.720%	10,000		
155	2029 Bureau Direct	-	6/30/2010	6/30/2020	30,000	30,000	3.243%	3.720%	Global	6/30/2020	6/30/2029	3.720%	30,000		
156	2029 Bureau Direct	-	7/31/2010	7/31/2020	17,000	17,000	3.118%	3.720%	Global	7/31/2020	7/31/2029	3.720%	17,000		
157	2029 Bureau Direct	-	4/30/2009	4/30/2023	25,000	25,000	4.391%	3.660%	Global	4/30/2023	4/30/2029	3.660%	25,000		
158	2029 Fish and Wildlife	-	10/31/2013	10/31/2028	22,000	22,000	3.880%	3.880%					22,000		
159	2029 Fish and Wildlife	-	1/31/2014	1/31/2029	7,000	7,000	3.896%	3.896%					7,000		
160	2029 Fish and Wildlife	-	10/31/2014	1/31/2029	15,000	15,000	2.497%	2.497%					15,000		
161	2029 Fish and Wildlife	-	4/30/2014	2/28/2029	7,000	7,000	2.476%	2.476%					7,000		
162	2029 Fish and Wildlife	-	8/31/2014	7/31/2029	5,000	5,000	2.497%	2.497%					5,000		
163	2029 Bureau Direct	-	12/31/2018	9/30/2029	13,000	13,000	3.100%	3.100%					13,000		
164	2029 Bureau Direct	-	12/31/2018	9/30/2029	43,000	43,000	3.100%	3.100%					43,000		
165	2029 Bureau Direct	-	10/31/2010	10/31/2034	20,000	20,000	4.211%	4.211%					20,000	545	
166	2029 Bureau Direct	-	8/12/2011	8/31/2037	30,000	30,000	4.208%	4.208%					30,000	971	

**TABLE 11D:**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
167	2029	Albeni Falls	Corps of Engineers	9/30/2010	9/30/2060	42	42	4.250%					42		
168	2029	Columbia River Fish Mitigation	Corps of Engineers	9/30/2010	9/30/2060	56,832	53,248	4.250%					53,248		
169	2029	Cougar	Corps of Engineers	9/30/2010	9/30/2060	59	59	4.250%					59		
170	2029	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2010	9/30/2060	6	6	4.250%					6		
171	2029	Hungry Horse Dam	Bureau of Reclamation	9/30/2011	9/30/2061	503	503	3.750%					503		
172	2029	Columbia Basin	Bureau of Reclamation	9/30/2011	9/30/2061	1,723	1,723	3.750%					1,723		
173	2029	Columbia River Fish Mitigation	Corps of Engineers	9/30/2011	9/30/2061	106,014	106,014	3.750%					24,638		
174	2029	Green Peter/Foster	Corps of Engineers	9/30/2011	9/30/2061	87	87	3.750%					87		
175	2029	Hills Creek	Corps of Engineers	9/30/2011	9/30/2061	12	12	3.750%					12		
176	2029	Ice Harbor	Corps of Engineers	9/30/2011	9/30/2061	819	819	3.750%					819		
177	2029	John Day	Corps of Engineers	9/30/2011	9/30/2061	175	175	3.750%					175		
178	2029	Libby	Corps of Engineers	9/30/2011	9/30/2061	152	152	3.750%					152		
179	2029	Lookout Dam	Corps of Engineers	9/30/2011	9/30/2061	17	17	3.750%					17		
180	2029	Lost Creek	Corps of Engineers	9/30/2011	9/30/2061	7	7	3.750%					7		
181	2029	Lower Granite	Corps of Engineers	9/30/2011	9/30/2061	8	8	3.750%					8		
182	2029	McNary	Corps of Engineers	9/30/2011	9/30/2061	565	565	3.750%					565		
183	2029	Cougar	Corps of Engineers	9/30/2014	9/30/2064	12	12	3.875%					12		
184	2029	Hungry Horse Dam	Bureau of Reclamation	9/30/2014	9/30/2064	12	12	3.875%					12		
185	2029	Bonneville Dam	Corps of Engineers	9/30/2014	9/30/2064			3.875%							
186	2029	Columbia River Fish Mitigation	Corps of Engineers	9/30/2014	9/30/2064	110,071	110,071	3.875%					110,071		
187	2029	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2014	9/30/2064	18	18	3.875%					18		
188	2029	Green Peter/Foster	Corps of Engineers	9/30/2014	9/30/2064	385	385	3.875%					385		
189	2029	Lower Granite	Corps of Engineers	9/30/2014	9/30/2064	2,644	2,644	3.875%					2,644		
190	2029	Lower Monument	Corps of Engineers	9/30/2014	9/30/2064	1,430	1,430	3.875%					1,430		
191	2029	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2014	9/30/2064	222	222	3.875%					222		
192	2029	McNary	Corps of Engineers	9/30/2014	9/30/2064	759	759	3.875%					759		
193		<b>FY 2029 Subtotal:</b>	-	-	-	<b>559,572</b>	<b>555,988</b>	-					<b>474,613</b>	<b>1,516</b>	
194	2030	Fish and Wildlife	-	11/30/2014	3/31/2030	8,000	8,000	2.455%					8,000		
195	2030	Corps	-	5/31/2016	5/31/2030	15,000	15,000	2.599%					15,000		
196	2030	Bureau Direct	-	7/31/2016	7/31/2030	12,000	12,000	2.145%					12,000		
197	2030	Corps	-	7/31/2016	7/31/2030	25,000	25,000	2.145%					25,000		
198	2030	Fish and Wildlife	-	9/30/2020	9/30/2035	38,000	47,000	3.590%					47,000		
199	2030	Bureau Direct	-	7/31/2020	7/31/2050	44,000	40,000	3.590%					40,000		
200	2030	Corps	-	7/31/2020	7/31/2050	24,000	9,100	3.590%					9,100		
201	2030	Bureau Direct	-	8/31/2020	8/31/2050	44,000	40,000	3.590%					40,000		
202	2030	Corps	-	8/31/2020	8/31/2050	24,000	43,000	3.590%					43,000		
203	2030	Bureau Direct	-	9/30/2020	9/30/2050	45,000	42,000	3.590%					31,855		
204	2030	Corps	-	9/30/2020	9/30/2050	26,000	45,000	3.590%					45,000		
205	2030	Bonneville Dam	Corps of Engineers	9/30/2011	9/30/2061	10,962	10,962	3.750%					10,962		
206	2030	Chief Joseph	Corps of Engineers	9/30/2011	9/30/2061	4	4	3.750%					4		
207	2030	Columbia River Fish Mitigation	Corps of Engineers	9/30/2011	9/30/2061	106,014	81,376	3.750%					81,376		
208	2030	Cougar	Corps of Engineers	9/30/2011	9/30/2061	282	282	3.750%					282		
209	2030	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2011	9/30/2061	122	122	3.750%					122		
210		<b>FY 2030 Subtotal:</b>	-	-	-	<b>422,383</b>	<b>418,845</b>	-					<b>408,700</b>		
211	2031	Fish and Wildlife	-	2/29/2016	2/28/2031	4,000	4,000	2.476%					4,000		
212	2031	Fish and Wildlife	-	10/31/2015	2/28/2031	4,000	4,000	2.476%					4,000		
213	2031	Fish and Wildlife	-	10/31/2015	3/31/2031	5,000	5,000	2.455%					5,000		
214	2031	Corps	-	4/30/2016	4/30/2031	53,000	53,000	2.661%					53,000		

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**TABLE 11D:  
Application of Amortization  
October 1, 2018 - September 30, 2021 Cost Evaluation Period  
(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
215	2031	Bureau Direct	-	4/30/2016	4/30/2031	17,000	17,000	2.661%	2.661%				17,000		
216	2031	Bureau Direct	-	9/30/2015	9/30/2033	10,000	10,000	3.134%	3.134%				9,863		137
217	2031	Corps	-	9/30/2015	9/30/2033	4,000	4,000	3.134%	3.134%				3,945		55
218	2031	Fish and Wildlife	-	9/28/2018	9/30/2033	18,000	18,000	3.550%	3.550%				17,928		72
219	2031	Bureau Direct	-	9/30/2020	9/30/2050	45,000	10,145	3.590%	3.590%				10,145		
220	2031	Cougar	Corps of Engineers	9/30/2012	9/30/2062	139	139	3.375%	3.375%				139		
221	2031	Hungry Horse Dam	Bureau of Reclamation	9/30/2012	9/30/2062	3	3	3.375%	3.375%				3		
222	2031	Minidoka/Palisades	Bureau of Reclamation	9/30/2012	9/30/2062	7	7	3.375%	3.375%				7		
223	2031	Green Peter/Foster	Corps of Engineers	9/30/2012	9/30/2062	28	28	3.375%	3.375%				28		
224	2031	Chief Joseph	Corps of Engineers	9/30/2012	9/30/2062	28	28	3.375%	3.375%				28		
225	2031	Columbia Basin	Bureau of Reclamation	9/30/2012	9/30/2062	11	11	3.375%	3.375%				11		
226	2031	Columbia River Fish Mitigation	Corps of Engineers	9/30/2012	9/30/2062	101,616	101,616	3.375%	3.375%				101,616		
227	2031	Hills Creek	Corps of Engineers	9/30/2012	9/30/2062	142	142	3.375%	3.375%				142		
228	2031	Ice Harbor	Corps of Engineers	9/30/2012	9/30/2062	115	115	3.375%	3.375%				115		
229	2031	John Day	Corps of Engineers	9/30/2012	9/30/2062	6,161	6,161	3.375%	3.375%				6,161		
230	2031	Libby	Corps of Engineers	9/30/2012	9/30/2062	16	16	3.375%	3.375%				16		
231	2031	Lookout Dam	Corps of Engineers	9/30/2012	9/30/2062	294	294	3.375%	3.375%				294		
232	2031	Lower Monument	Corps of Engineers	9/30/2012	9/30/2062	89	89	3.375%	3.375%				89		
233	2031	McNary	Corps of Engineers	9/30/2012	9/30/2062	12	11	3.375%	3.375%				11		
234	2031	RRP - Green Springs	Bureau of Reclamation	9/30/2012	9/30/2062	2	2	3.375%	3.375%				2		
235	2031	Bonneville Dam	Corps of Engineers	9/30/2015	9/30/2065	102	102	3.250%	3.250%				102		
236	2031	Columbia River Fish Mitigation	Corps of Engineers	9/30/2015	9/30/2065	64,291	64,291	3.250%	3.250%				64,291		
237	2031	Green Peter/Foster	Corps of Engineers	9/30/2015	9/30/2065	68	68	3.250%	3.250%				68		
238	2031	Hungry Horse Dam	Bureau of Reclamation	9/30/2015	9/30/2065			3.250%	3.250%						
239	2031	Ice Harbor	Corps of Engineers	9/30/2015	9/30/2065	3,175	3,175	3.250%	3.250%				3,175		
240	2031	John Day	Corps of Engineers	9/30/2015	9/30/2065	163	163	3.250%	3.250%				163		
241	2031	Lower Granite	Corps of Engineers	9/30/2015	9/30/2065	1,597	1,597	3.250%	3.250%				1,597		
242	2031	Minidoka/Palisades	Bureau of Reclamation	9/30/2015	9/30/2065	19,237	19,237	3.250%	3.250%				19,237		
243	2031	The Dalles	Corps of Engineers	9/30/2015	9/30/2065	302	302	3.250%	3.250%				302		
244	2031	Columbia River Fish Mitigation	Corps of Engineers	9/30/2019	9/30/2069	63,746	87,381	3.130%	3.130%				58,430		
245	2031	Columbia River Fish Mitigation	Corps of Engineers	9/30/2020	9/30/2070	31,796	35,551	3.440%	3.440%				35,551		
246		<b>FY 2031 Subtotal:</b>	-	-	-	<b>453,139</b>	<b>445,674</b>	-	-				<b>416,459</b>		<b>264</b>
247	2032	Bureau Direct	-	9/30/2014	5/31/2032	16,000	16,000	2.544%	2.544%				16,000		
248	2032	Bureau Direct	-	9/30/2014	5/31/2032	10,000	10,000	2.544%	2.544%				10,000		
249	2032	Bureau Direct	-	9/30/2014	6/30/2033	11,000	11,000	2.530%	2.530%				10,818		182



**TABLE 11D:**  
**Application of Amortization**  
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**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
250	2032	Bureau Direct	-	9/30/2014	6/30/2033	12,000	12,000	2.530%					11,802		198
251	2032	Bureau Direct	-	9/30/2014	7/31/2033	15,000	15,000	2.497%					14,746		254
252	2032	Bureau Direct	-	6/30/2013	1/31/2039	35,000	35,000	2.497%					32,598		2,402
253	2032	Bureau Direct	-	8/31/2018	1/31/2045	13,000	13,000	2.497%					11,364		1,636
254	2032	Bureau Direct	-	8/31/2018	6/30/2045	16,000	16,000	2.530%					13,978		2,022
255	2032	Corps	-	8/31/2018	7/31/2046	32,000	32,000	2.497%					27,624		4,376
256	2032	Corps	-	8/31/2018	10/31/2046	27,000	27,000	2.497%					23,266		3,734
257	2032	Corps	-	8/31/2018	11/30/2046	25,000	25,000	2.544%					21,639		3,361
258	2032	Corps	-	8/31/2018	5/31/2047	21,000	21,000	2.544%					18,116		2,884
259	2032	Corps	-	8/31/2018	6/30/2047	24,000	24,000	2.530%					20,605		3,395
260	2032	Corps	-	9/28/2018	1/31/2048	2,000	2,000	2.497%					1,702		298
261	2032	Corps	-	9/28/2018	7/31/2048	64,000	64,000	2.497%					33,444		5,974
262	2032	Bonneville Dam	Corps of Engineers	9/30/2013	9/30/2063	268	268	2.875%					268		
263	2032	Chief Joseph	Corps of Engineers	9/30/2013	9/30/2063	10	10	2.875%					10		
264	2032	Columbia Basin	Bureau of Reclamation	9/30/2013	9/30/2063	3,078	3,078	2.875%					3,078		
265	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2013	9/30/2063	95,274	95,274	2.875%					95,274		
266	2032	Cougar	Corps of Engineers	9/30/2013	9/30/2063	4,088	4,088	2.875%					4,088		
267	2032	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2013	9/30/2063	528	528	2.875%					528		
268	2032	John Day	Corps of Engineers	9/30/2013	9/30/2063	17	17	2.875%					17		
269	2032	Little Goose	Corps of Engineers	9/30/2013	9/30/2063	66	66	2.875%					66		
270	2032	McNary	Corps of Engineers	9/30/2013	9/30/2063	1,000	1,000	2.875%					1,000		
271	2032	RRP - Green Springs	Bureau of Reclamation	9/30/2013	9/30/2063			2.875%							
272	2032	Boise	Bureau of Reclamation	9/30/2016	9/30/2066	118	118	3.000%					118		
273	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2016	9/30/2066	30,066	30,066	3.000%					30,066		
274	2032	Cougar	Corps of Engineers	9/30/2016	9/30/2066	2	2	3.000%					2		
275	2032	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2016	9/30/2066	31	31	3.000%					31		
276	2032	Green Peter/Foster	Corps of Engineers	9/30/2016	9/30/2066	70	70	3.000%					70		
277	2032	Ice Harbor	Corps of Engineers	9/30/2016	9/30/2066	558	558	3.000%					558		
278	2032	Lower Granite	Corps of Engineers	9/30/2016	9/30/2066	1,878	1,878	3.000%					1,878		
279	2032	Lower Monument	Corps of Engineers	9/30/2016	9/30/2066	155	155	3.000%					155		
280	2032	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2016	9/30/2066	1,256	1,256	3.000%					1,256		
281	2032	Minidoka/Palisades	Bureau of Reclamation	9/30/2016	9/30/2066	206	206	3.000%					206		
282	2032	The Dalles	Corps of Engineers	9/30/2016	9/30/2066	4	4	3.000%					4		
283	2032	Columbia Basin	Bureau of Reclamation	9/30/2018	9/30/2068	52	52	2.750%					52		
284	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2018	9/30/2068	48,446	48,446	2.750%					48,446		
285	2032	Libby	Corps of Engineers	9/30/2018	9/30/2068	282	282	2.750%					282		
286	2032	Little Goose	Corps of Engineers	9/30/2018	9/30/2068	2,707	2,707	2.750%					2,707		
287	2032	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2018	9/30/2068	1,608	1,608	2.750%					1,608		
288	2032	Minidoka/Palisades	Bureau of Reclamation	9/30/2018	9/30/2068	9	9	2.750%					9		
289	2032	The Dalles	Corps of Engineers	9/30/2018	9/30/2068	14	14	2.750%					14		
290	2032	Yakima Chandler/Kenniwick	Bureau of Reclamation	9/30/2018	9/30/2068	49	49	2.750%					49		
291	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2019	9/30/2069	63,746	28,951	3.130%					28,951		
292		<b>FY 2032 Subtotal:</b>	-	-	-	<b>578,587</b>	<b>543,792</b>	-					<b>488,493</b>		<b>30,717</b>
293	2033	Bureau Direct	-	2/27/2012	2/28/2034	55,000	55,000	2.476%					54,354		646
294	2033	Corps	-	2/29/2016	2/28/2045	3,000	3,000	2.476%					2,641		359
295	2033	Bureau Direct	-	8/31/2018	2/28/2045	5,000	5,000	2.476%					4,401		599
296	2033	Bureau Direct	-	9/28/2018	2/28/2045	29,000	29,000	2.476%					25,525		3,475
297	2033	Bureau Direct	-	8/31/2018	3/31/2045	26,000	26,000	2.455%					22,857		3,143

**TABLE 11D:**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
298	2033	Corps	-	8/31/2018	2/28/2047	7,000	7,000	2.476%					6,048		952
299	2033	Corps	-	8/31/2018	3/31/2047	24,000	24,000	2.455%					20,709		3,291
300	2033	Corps	-	9/28/2018	3/31/2048	54,200	54,200	2.455%					46,348		7,852
301	2033	Corps	-	9/28/2018	7/31/2048	64,000	24,582	2.497%					21,036		3,546
302	2033	Corps	-	9/28/2018	8/31/2048	17,000	17,000	2.476%					14,508		2,492
303	2033	Replacements	-	3/31/2021	3/31/2066	197,900	197,900	4.020%					197,900		
304	2033	Replacements	-	3/31/2022	3/31/2067	197,900	197,900	4.020%					24,109		
305	2033	Columbia Basin	Bureau of Reclamation	9/30/2017	9/30/2067	2,865	2,865	2.375%					2,865		
306	2033	Cougar	Corps of Engineers	9/30/2017	9/30/2067	2	2	2.375%					2		
307	2033	Columbia River Fish Mitigation	Corps of Engineers	9/30/2017	9/30/2067	57,719	57,719	2.375%					57,719		
308	2033	Lower Monument	Corps of Engineers	9/30/2017	9/30/2067	942	942	2.375%					942		
309	2033	McNary	Corps of Engineers	9/30/2017	9/30/2067	239	239	2.375%					239		
310	2033	Minidoka/Palisades	Bureau of Reclamation	9/30/2017	9/30/2067	127	127	2.375%					127		
311	2033	The Dalles	Corps of Engineers	9/30/2017	9/30/2067	10	10	2.375%					10		
312	<b>FY 2033 Subtotal:</b>		-	-	-	<b>741,904</b>	<b>702,486</b>	-					<b>502,340</b>		<b>26,355</b>
313	2034	Replacements	-	3/31/2022	3/31/2067	197,900	173,791	4.020%					173,791		
314	2034	Replacements	-	3/31/2023	3/31/2068	197,900	197,900	4.020%					197,900		
315	2034	Replacements	-	3/31/2024	3/31/2069	197,900	197,900	4.020%					148,021		
316	<b>FY 2034 Subtotal:</b>		-	-	-	<b>593,701</b>	<b>569,592</b>	-					<b>519,713</b>		
317	2035	Replacements	-	3/31/2024	3/31/2069	197,900	49,879	4.020%					49,879		
318	2035	Replacements	-	3/31/2025	3/31/2070	197,900	197,900	4.020%					197,900		
319	2035	Replacements	-	3/31/2026	3/31/2071	197,900	197,900	4.020%					197,900		
320	2035	Replacements	-	3/31/2027	3/31/2072	197,900	197,900	4.020%					106,013		
321	<b>FY 2035 Subtotal:</b>		-	-	-	<b>791,602</b>	<b>643,581</b>	-					<b>551,694</b>		
322	2036	Replacements	-	3/31/2027	3/31/2072	197,900	91,887	4.020%					91,887		
323	2036	Replacements	-	3/31/2028	3/31/2073	197,900	197,900	4.020%					197,900		
324	2036	Replacements	-	3/31/2029	3/31/2074	197,900	197,900	4.020%					197,900		
325	2036	Replacements	-	3/31/2030	3/31/2075	197,900	197,900	4.020%					72,132		
326	<b>FY 2036 Subtotal:</b>		-	-	-	<b>791,602</b>	<b>685,588</b>	-					<b>559,820</b>		
327	2037	Replacements	-	3/31/2030	3/31/2075	197,900	125,768	4.020%					125,768		
328	2037	Replacements	-	3/31/2031	3/31/2076	197,900	197,900	4.020%					197,900		
329	2037	Replacements	-	3/31/2032	3/31/2077	197,900	197,900	4.020%					197,900		
330	2037	Replacements	-	3/31/2033	3/31/2078	197,900	197,900	4.020%					70,923		
331	<b>FY 2037 Subtotal:</b>		-	-	-	<b>791,602</b>	<b>719,469</b>	-					<b>592,491</b>		
332	2038	Replacements	-	3/31/2033	3/31/2078	197,900	126,978	4.020%					126,978		

**TABLE 11D:**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
333	2038	Replacements	-	3/31/2034	3/31/2079	197,900	197,900	4.020%					197,900		
334	2038	Replacements	-	3/31/2035	3/31/2080	197,900	197,900	4.020%					197,900		
335	2038	Replacements	-	3/31/2036	3/31/2081	197,900	197,900	4.020%					132,910		
336		<b>FY 2038 Subtotal:</b>	-	-	-	<b>791,602</b>	<b>720,679</b>	-					<b>655,689</b>		
337	2039	Replacements	-	3/31/2036	3/31/2081	197,900	64,991	4.020%					64,991		
338	2039	Replacements	-	3/31/2037	3/31/2082	197,900	197,900	4.020%					197,900		
339	2039	Replacements	-	3/31/2038	3/31/2083	197,900	197,900	4.020%					197,900		
340		<b>FY 2039 Subtotal:</b>	-	-	-	<b>593,701</b>	<b>460,791</b>	-					<b>460,791</b>		
341	2040	Replacements	-	3/31/2039	3/31/2084	197,900	197,900	4.020%					197,900		
342		<b>FY 2040 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
343	2041	Replacements	-	3/31/2040	3/31/2085	197,900	197,900	4.020%					197,900		
344		<b>FY 2041 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
345	2042	Replacements	-	3/31/2041	3/31/2086	197,900	197,900	4.020%					197,900		
346		<b>FY 2042 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
347	2043	Replacements	-	3/31/2042	3/31/2087	197,900	197,900	4.020%					197,900		
348		<b>FY 2043 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
349	2044	Replacements	-	3/31/2043	3/31/2088	197,900	197,900	4.020%					197,900		
350		<b>FY 2044 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
351	2045	Replacements	-	3/31/2044	3/31/2089	197,900	197,900	4.020%					197,900		
352		<b>FY 2045 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
353	2046	Replacements	-	3/31/2045	3/31/2090	197,900	197,900	4.020%					197,900		
354		<b>FY 2046 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
355	2047	Replacements	-	3/31/2046	3/31/2091	197,900	197,900	4.020%					197,900		
356		<b>FY 2047 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
357	2048	Replacements	-	3/31/2047	3/31/2092	197,900	197,900	4.020%					197,900		
358		<b>FY 2048 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
359	2049	Replacements	-	3/31/2048	3/31/2093	197,900	197,900	4.020%					197,900		
360		<b>FY 2049 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
361	2050	Replacements	-	3/31/2049	3/31/2094	197,900	197,900	4.020%					197,900		
362		<b>FY 2050 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
363	2051	Replacements	-	3/31/2050	3/31/2095	197,900	197,900	4.020%					197,900		
364		<b>FY 2051 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
365	2052	Replacements	-	3/31/2051	3/31/2096	197,900	197,900	4.020%					197,900		
366		<b>FY 2052 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
367	2053	Replacements	-	3/31/2052	3/31/2097	197,900	197,900	4.020%					197,900		
368		<b>FY 2053 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
369	2054	Replacements	-	3/31/2053	3/31/2098	197,900	197,900	4.020%					197,900		
370		<b>FY 2054 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
371	2055	Replacements	-	3/31/2054	3/31/2099	197,900	197,900	4.020%					197,900		
372		<b>FY 2055 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
373	2056	Replacements	-	3/31/2055	3/31/2100	197,900	197,900	4.020%					197,900		
374		<b>FY 2056 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
375	2057	Replacements	-	3/31/2056	3/31/2101	197,900	197,900	4.020%					197,900		
376		<b>FY 2057 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
377	2058	Replacements	-	3/31/2057	3/31/2102	197,900	197,900	4.020%					197,900		
378		<b>FY 2058 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
379	2059	Replacements	-	3/31/2058	3/31/2103	197,900	197,900	4.020%					197,900		
380		<b>FY 2059 Subtotal:</b>	-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		

BP-20-FS-DPA-02A

**TABLE 11D:**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2020)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Rolled Maturity Date	Roll Rate	Principal Paid	Premium	Discount
381	2060	Replacements	-	3/31/2059	3/31/2104	197,900	197,900	4.020%	4.020%				197,900		
382	<b>FY 2060 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
383	2061	Replacements	-	3/31/2060	3/31/2105	197,900	197,900	4.020%	4.020%				197,900		
384	<b>FY 2061 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
385	2062	Replacements	-	3/31/2061	3/31/2106	197,900	197,900	4.020%	4.020%				197,900		
386	<b>FY 2062 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
387	2063	Replacements	-	3/31/2062	3/31/2107	197,900	197,900	4.020%	4.020%				197,900		
388	<b>FY 2063 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
389	2064	Replacements	-	3/31/2063	3/31/2108	197,900	197,900	4.020%	4.020%				197,900		
390	<b>FY 2064 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
391	2065	Replacements	-	3/31/2064	3/31/2109	197,900	197,900	4.020%	4.020%				197,900		
392	<b>FY 2065 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
393	2066	Replacements	-	3/31/2065	3/31/2110	197,900	197,900	4.020%	4.020%				197,900		
394	<b>FY 2066 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
395	2067	Replacements	-	3/31/2066	3/31/2111	197,900	197,900	4.020%	4.020%				197,900		
396	<b>FY 2067 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
397	2068	Replacements	-	3/31/2067	3/31/2112	197,900	197,900	4.020%	4.020%				197,900		
398	<b>FY 2068 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
399	2069	Replacements	-	3/31/2068	3/31/2113	197,900	197,900	4.020%	4.020%				197,900		
400	<b>FY 2069 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
401	2070	Replacements	-	3/31/2069	3/31/2114	197,900	197,900	4.020%	4.020%				197,900		
402	<b>FY 2070 Subtotal:</b>		-	-	-	<b>197,900</b>	<b>197,900</b>	-					<b>197,900</b>		
403	<b>Grand Total</b>					<b>\$17,950,616</b>	<b>\$15,669,543</b>	-					<b>\$13,662,431</b>	<b>\$23,206</b>	<b>\$57,335</b>

**TABLE 11E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S		
				2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034		
2	Appropriation	Bureau of Reclamation	Boise	7	4	4	4	4	4	4	4	4	4	4	4	4	2	-	-		
3			Columbia Basin	449	408	408	408	408	408	408	408	408	260	260	223	158	158	157	34	-	
4			Hungry Horse Dam	59	55	55	55	55	55	55	55	55	53	53	19	-	-	-	-	-	
5			Minidoka/Palisades	635	635	635	635	635	635	635	635	635	635	635	635	635	635	635	9	2	-
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7			Yakima Chandler/Kenwick	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	-	-
8			<b>Bureau of Reclamation Subtotal:</b>	<b>1,152</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>1,105</b>	<b>953</b>	<b>953</b>	<b>882</b>	<b>798</b>	<b>798</b>	<b>169</b>	<b>36</b>	-
9			Albeni Falls	4	4	4	4	4	4	4	4	4	4	4	4	2	-	-	-	-	-
10			Bonneville Dam	1,433	721	721	721	721	721	721	721	721	721	603	603	422	422	11	8	-	-
11			Chief Joseph	1,254	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1	1	1	-	-	-
12			Columbia River Fish Mitigation	46,042	39,699	40,922	40,792	37,864	36,757	34,395	32,060	30,992	28,695	26,325	18,873	15,821	6,584	685	-	-	-
13			Cougar	146	146	146	146	146	146	146	146	146	141	141	136	133	122	118	-	-	-
14			Detroit Lake/Big Cliff	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16	-	-	-
15			Dworshak	105	104	104	104	104	104	104	104	104	101	-	-	-	-	-	-	-	-
16			Green Peter/Foster	23	23	23	23	23	23	23	23	23	23	23	23	23	5	5	2	-	-
17			Hills Creek	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-
18			Ice Harbor	278	278	278	278	278	278	278	278	278	278	163	154	124	124	17	-	-	-
19			John Day	330	303	303	303	303	303	303	303	303	303	235	220	214	214	1	-	-	-
20			Libby	92	16	16	16	16	16	16	16	16	16	16	14	8	8	4	-	-	-
21			Little Goose	217	216	216	216	216	216	216	216	216	216	78	76	76	76	39	-	-	-
22			Lookout Dam	11	11	11	11	11	11	11	11	11	11	11	11	10	10	-	-	-	-
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24			Lower Granite	509	508	508	508	508	508	508	508	508	405	260	211	108	108	56	-	-	-
25	Lower Monument	201	188	188	188	188	188	188	188	188	188	85	85	85	30	30	27	11	-		
26	McNary	279	85	85	85	85	85	85	85	85	85	85	85	35	35	34	3	-	-		
27	The Dalles	182	11	11	11	11	11	11	11	11	11	11	11	11	11	1	-	-	-		
28	<b>Corps of Engineers Subtotal:</b>	<b>51,130</b>	<b>43,419</b>	<b>44,642</b>	<b>44,512</b>	<b>41,583</b>	<b>40,476</b>	<b>38,115</b>	<b>35,780</b>	<b>34,381</b>	<b>31,516</b>	<b>27,800</b>	<b>20,071</b>	<b>16,598</b>	<b>6,907</b>	<b>700</b>	-	-	-		
29	Lower Snake Fish & Wildlife	183	163	163	163	163	163	163	163	163	163	163	95	86	82	60	-	-	-		
30	<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	<b>183</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>163</b>	<b>95</b>	<b>86</b>	<b>82</b>	<b>60</b>	-	-	-		
31	<b>Appropriation Subtotal:</b>	<b>52,466</b>	<b>44,686</b>	<b>45,909</b>	<b>45,779</b>	<b>42,851</b>	<b>41,743</b>	<b>39,382</b>	<b>37,047</b>	<b>35,496</b>	<b>32,631</b>	<b>28,777</b>	<b>20,956</b>	<b>17,478</b>	<b>7,135</b>	<b>735</b>	-	-	-		
32	(Less Interest Income)	(2,151)	(1,225)	(2,082)	(1,207)	(984)	(1,000)	(995)	(1,001)	(1,021)	(1,049)	(2,516)	(2,148)	(2,220)	(2,445)	(2,479)	(2,511)	-	-		
33	Bureau Direct	33,933	30,679	27,043	20,333	20,120	19,556	19,556	19,556	19,556	19,556	18,925	9,448	6,848	4,777	1,415	-	-	-		
34	Interest Accrual	5,176	4,105	2,414	2,414	1,959	1,959	1,959	1,959	1,959	1,959	1,959	1,503	1,102	914	186	-	-	-		
35	Interest Accrual Reversal	(5,080)	(5,176)	(4,105)	(2,414)	(2,414)	(1,959)	(1,959)	(1,959)	(1,959)	(1,959)	(1,959)	(1,503)	(1,102)	(914)	(186)	-	-	-		
36	Conservation	10,069	10,069	10,069	9,591	7,742	4,136	2,851	1,322	1,140	312	-	-	-	-	-	-	-	-		
37	Interest Accrual	2,258	2,258	2,178	2,120	1,282	689	304	259	259	-	-	-	-	-	-	-	-	-		
38	Interest Accrual Reversal	(2,258)	(2,258)	(2,258)	(2,178)	(2,120)	(1,282)	(689)	(304)	(259)	-	-	-	-	-	-	-	-	-		
39	Construction (AS)	780	606	557	408	344	280	215	-	-	-	-	-	-	-	-	-	-	-		
40	Interest Accrual	198	95	61	32	32	-	-	-	-	-	-	-	-	-	-	-	-	-		
41	Interest Accrual Reversal	(186)	(198)	(95)	(61)	(32)	(32)	-	-	-	-	-	-	-	-	-	-	-	-		
42	<b>BPA Borrowing</b>																				
43	Corps	9,011	10,150	13,429	13,429	13,429	13,429	13,429	13,429	13,429	13,429	13,429	13,429	13,429	11,686	8,958	6,265	1,599	-		
44	Interest Accrual	2,088	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	1,869	1,284	158	-	-		
45	Interest Accrual Reversal	(1,167)	(2,088)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(2,273)	(1,869)	(1,284)	(158)	-	-		
46	Fish and Wildlife	12,083	11,051	12,283	11,827	10,858	10,912	10,912	9,472	6,883	5,510	3,804	1,901	479	-	-	-	-	-		
47	Interest Accrual	1,876	1,876	1,648	1,648	1,648	1,648	1,648	1,648	1,068	513	513	17	17	-	-	-	-	-		
48	Interest Accrual Reversal	(1,924)	(1,876)	(1,876)	(1,648)	(1,648)	(1,648)	(1,648)	(1,648)	(1,068)	(513)	(513)	(17)	(17)	-	-	-	-	-		
49	Technology (G)	664	664	550	293	144	144	-	-	-	-	-	-	-	-	-	-	-	-		
50	Interest Accrual	110	110	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
51	Interest Accrual Reversal	(110)	(110)	(25)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
52	<b>BPA Borrowing Subtotal:</b>	<b>65,370</b>	<b>61,004</b>	<b>59,732</b>	<b>54,561</b>	<b>50,359</b>	<b>46,832</b>	<b>45,726</b>	<b>42,154</b>	<b>39,431</b>	<b>37,498</b>	<b>32,689</b>	<b>20,082</b>	<b>13,276</b>	<b>6,743</b>	<b>191</b>	<b>(2,511)</b>	-	-		
53	Replacements	-	-	3,978	11,933	19,889	27,845	35,800	43,756	51,711	59,667	67,623	75,578	83,534	91,489	94,983	88,030	-	-		
54	<b>Federal Generation Replacements</b>																				
55	<b>Federal Generation Replacements Subtotal:</b>	<b>-</b>	<b>-</b>	<b>3,978</b>	<b>11,933</b>	<b>19,889</b>	<b>27,845</b>	<b>35,800</b>	<b>43,756</b>	<b>51,711</b>	<b>59,667</b>	<b>67,623</b>	<b>75,578</b>	<b>83,534</b>	<b>91,489</b>	<b>94,983</b>	<b>88,030</b>	-	-		
56	<b>Treasury Subtotal:</b>	<b>65,370</b>	<b>61,004</b>	<b>63,710</b>	<b>66,494</b>	<b>70,248</b>	<b>74,676</b>	<b>81,526</b>	<b>85,909</b>	<b>91,142</b>	<b>97,165</b>	<b>100,312</b>	<b>95,661</b>	<b>96,810</b>	<b>98,232</b>	<b>95,173</b>	<b>85,519</b>	-	-		
57	<b>Grand Total:</b>	<b>\$117,836</b>	<b>\$105,690</b>	<b>\$109,619</b>	<b>\$112,273</b>	<b>\$113,099</b>	<b>\$116,420</b>	<b>\$120,908</b>	<b>\$122,956</b>	<b>\$126,638</b>	<b>\$129,796</b>	<b>\$129,089</b>	<b>\$116,616</b>	<b>\$114,288</b>	<b>\$105,367</b>	<b>\$95,909</b>	<b>\$85,519</b>	-	-		

**TABLE 11E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

	A	B	C	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
1	Obligation Type	General Project	Specific Project	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
2			Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		<b>Bureau of Reclamation</b>	Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7			Yakima Chandler/Kennewick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9			Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	<b>Appropriation</b>		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18			Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		<b>Lower Snake Fish &amp; Wildlife</b>	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31		<b>Appropriation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32			(Less Interest Income)	(2,657)	(2,756)	(2,807)	(2,979)	(3,402)	(3,439)	(3,473)	(3,476)	(3,479)	(2,962)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)
33			Bureau Direct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36			Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39			Construction (AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		<b>BPA Borrowing</b>	Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42			Corps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	<b>Treasury</b>		Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45			Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48			Technology (G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51			<b>BPA Borrowing Subtotal:</b>	(2,657)	(2,756)	(2,807)	(2,979)	(3,402)	(3,439)	(3,473)	(3,476)	(3,479)	(2,962)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)
52		<b>Federal Generation Replacements</b>	Replacements	74,450	60,064	44,858	27,725	13,240	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956
53			<b>Federal Generation Replacements Subtotal:</b>	<b>74,450</b>	<b>60,064</b>	<b>44,858</b>	<b>27,725</b>	<b>13,240</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>
54		<b>Treasury Subtotal:</b>		71,793	57,308	42,051	24,746	9,838	4,517	4,483	4,480	4,477	4,994	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540
55	<b>Grand Total:</b>			<b>\$71,793</b>	<b>\$57,308</b>	<b>\$42,051</b>	<b>\$24,746</b>	<b>\$9,838</b>	<b>\$4,517</b>	<b>\$4,483</b>	<b>\$4,480</b>	<b>\$4,477</b>	<b>\$4,994</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>

**TABLE 11E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

	A	B	C	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	
1	Obligation Type	General Project	Specific Project	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	Total	
2			Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,557	
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	570	
5		<b>Bureau of Reclamation</b>	Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,264	
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
7			Yakima Chandler/Kenniwick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>13,473</b>	
9			Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,549	
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,007	
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	436,509	
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,959	
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233	
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	935	
16	<b>Appropriation</b>		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	
18			Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,082	
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,639	
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	268	
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,294	
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	136	
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,216	
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,868	
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,240	
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	309	
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>477,628</b>	
29		<b>Lower Snake Fish &amp; Wildlife</b>	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,971	
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>1,971</b>	
31		<b>Appropriation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	493,072	
32			(Less Interest Income)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(95,278)	
33			Bureau Direct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	271,302	
34			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29,567	
35			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(34,647)	
36			Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57,299	
37			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,606	
38			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,863)	
39			Construction (AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,190	
40			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	418	
41		<b>BPA Borrowing</b>	Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(603)	
42			Corps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168,525	
43	<b>Treasury</b>		Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,126	
44			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(29,293)	
45			Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,976	
46			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,121	
47			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(16,045)	
48			Technology (G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,603	
49			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	244	
50			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(353)	
51			<b>BPA Borrowing Subtotal:</b>	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	(1,416)	<b>504,893</b>	
52		<b>Federal Generation Replacements</b>	Replacements	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	7,956	1,222,776	
53			<b>Federal Generation Replacements Subtotal:</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>7,956</b>	<b>1,222,776</b>
54		<b>Treasury Subtotal:</b>		6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	6,540	1,727,669	
55	<b>Grand Total:</b>			<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$6,540</b>	<b>\$2,220,741</b>	

**TABLE 11F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Obligation Type	General Project	Specific Project	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2			Boise	64	-	-	-	-	-	-	17	-	-	-	-	-	118	-	-
3			Columbia Basin	835	-	-	-	-	-	-	3,325	-	877	1,723	-	11	3,130	2,865	-
4			Hungry Horse Dam	76	-	-	-	-	-	-	60	-	779	515	-	3	-	-	-
5		<b>Bureau of Reclamation</b>	Mindokoa/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	19,244	215	127	-
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
7			Yakima Chandler/Kenniwick	-	-	-	-	-	-	-	15	-	-	-	-	-	49	-	-
8			<b>Bureau of Reclamation Subtotal:</b>	<b>975</b>	-	-	-	-	-	-	<b>3,418</b>	-	<b>1,656</b>	<b>2,238</b>	-	<b>19,259</b>	<b>3,513</b>	<b>2,991</b>	-
9			Albeni Falls	-	-	-	-	-	-	-	-	-	57	42	-	-	-	-	-
10			Bonneville Dam	14,609	-	-	-	-	-	-	2,628	-	4,169	-	10,962	102	268	-	-
11			Chief Joseph	3,500	-	-	-	-	-	-	-	-	24,727	-	4	28	10	-	-
12			Columbia River Fish Mitigation	197,047	-	2,896	65,072	24,607	52,469	51,892	23,729	52,513	54,274	187,957	81,376	259,888	202,738	57,719	-
13			Cougar	-	-	-	-	-	-	-	109	-	121	70	282	139	4,090	2	-
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	18	-	-	558	-	-
15			Dworshak	10	-	-	-	-	-	-	73	2,307	-	-	-	-	-	-	-
16	<b>Appropriation</b>		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	472	-	97	70	-	-
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	12	-	142	-	-	-
18		<b>Corps of Engineers</b>	Ice Harbor	14	-	-	-	-	-	-	-	2,615	207	819	-	3,290	558	-	-
19			John Day	601	-	-	-	-	-	-	-	1,548	356	175	-	6,325	17	-	-
20			Libby	1,567	-	-	-	-	-	-	-	-	40	152	-	16	282	-	-
21			Little Goose	13	-	-	-	-	-	-	-	3,171	30	-	-	-	2,773	-	-
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	17	-	294	-	-	-
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-
24			Lower Granite	24	-	-	-	-	-	-	2,348	3,321	1,156	2,653	-	1,597	1,878	-	-
25			Lower Monument	294	-	-	-	-	-	-	2,332	-	-	1,430	-	89	155	942	-
26			McNary	4,295	-	-	-	-	-	-	-	-	-	1,324	-	11	1,000	239	-
27			The Dalles	3,681	-	-	-	-	-	-	-	-	-	-	-	302	18	10	-
28			<b>Corps of Engineers Subtotal:</b>	<b>225,656</b>	-	<b>2,896</b>	<b>65,072</b>	<b>24,607</b>	<b>52,469</b>	<b>51,892</b>	<b>31,220</b>	<b>65,475</b>	<b>85,137</b>	<b>195,147</b>	<b>92,623</b>	<b>272,319</b>	<b>214,415</b>	<b>58,911</b>	-
29		<b>Lower Snake Fish &amp; Wildlife</b>	Lower Snake Fish and Wildlife	453	-	-	-	-	-	-	-	-	1,540	228	122	-	2,864	-	-
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	<b>453</b>	-	-	-	-	-	-	-	-	<b>1,540</b>	<b>228</b>	<b>122</b>	-	<b>2,864</b>	-	-
31		<b>Appropriation Subtotal:</b>		227,084	-	2,896	65,072	24,607	52,469	51,892	34,637	65,475	88,333	197,613	92,745	291,578	220,792	61,903	-
32			<b>Bureau Direct</b>	145,000	121,072	266,928	19,000	-	-	-	-	-	-	221,000	123,855	37,008	121,305	107,138	-
33			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			<b>Conservation</b>	-	-	19,000	45,000	102,000	70,000	64,000	6,000	18,000	25,000	-	-	-	-	-	-
36			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			<b>Construction (AS)</b>	5,250	18,100	7,000	5,800	-	4,200	6,000	-	-	-	-	-	-	-	-	-
39			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		<b>BPA Borrowing</b>	<b>Corps</b>	-	33,900	-	-	-	-	-	-	-	-	-	137,100	56,945	146,396	111,289	-
42			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			<b>Fish and Wildlife</b>	46,000	-	20,000	31,000	-	-	-	80,000	55,000	26,000	56,000	55,000	30,928	-	-	-
45	<b>Bond</b>		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			<b>Technology (G)</b>	-	-	35,000	6,000	-	-	4,000	-	-	-	-	-	-	-	-	-
48			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			<b>BPA Borrowing Subtotal:</b>	<b>196,250</b>	<b>173,072</b>	<b>347,928</b>	<b>106,800</b>	<b>102,000</b>	<b>74,200</b>	<b>74,000</b>	<b>86,000</b>	<b>73,000</b>	<b>51,000</b>	<b>277,000</b>	<b>315,955</b>	<b>124,881</b>	<b>267,701</b>	<b>218,427</b>	-
51			Replacements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	222,010	519,713
52		<b>Federal Generation Replacements</b>	Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54			<b>Federal Generation Replacements Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>222,010</b>
55			Discounts	-	-	-	-	-	-	-	-	-	-	-	-	(264)	(30,717)	(26,355)	-
56		<b>Make Whole Call</b>	Premiums	-	13	21,677	-	-	-	-	-	-	-	1,516	-	-	-	-	-
57			<b>Make Whole Call Subtotal:</b>	-	<b>13</b>	<b>21,677</b>	-	-	-	-	-	-	-	<b>1,516</b>	-	<b>(264)</b>	<b>(30,717)</b>	<b>(26,355)</b>	-
58		<b>Bond Subtotal:</b>		196,250	173,072	347,928	106,800	102,000	74,200	74,000	86,000	73,000	51,000	277,000	315,955	125,145	298,418	466,792	519,713
59		<b>Irrigation Assistance</b>	Irrigation Assistance	56,604	24,331	14,747	16,060	12,852	15,111	13,550	20,774	6,121	11,191	4,065	1,996	10,530	-	4,347	-
60	<b>Irrigation</b>		<b>Irrigation Assistance Subtotal:</b>	<b>56,604</b>	<b>24,331</b>	<b>14,747</b>	<b>16,060</b>	<b>12,852</b>	<b>15,111</b>	<b>13,550</b>	<b>20,774</b>	<b>6,121</b>	<b>11,191</b>	<b>4,065</b>	<b>1,996</b>	<b>10,530</b>	-	<b>4,347</b>	-
61			<b>Irrigation Subtotal:</b>	56,604	24,331	14,747	16,060	12,852	15,111	13,550	20,774	6,121	11,191	4,065	1,996	10,530	-	4,347	-
62	<b>Grand Total:</b>			<b>\$479,938</b>	<b>\$197,403</b>	<b>\$365,571</b>	<b>\$187,932</b>	<b>\$139,459</b>	<b>\$141,780</b>	<b>\$139,443</b>	<b>\$141,412</b>	<b>\$144,595</b>	<b>\$150,524</b>	<b>\$478,677</b>	<b>\$410,696</b>	<b>\$427,253</b>	<b>\$519,210</b>	<b>\$533,042</b>	<b>\$519,713</b>



**TABLE 11F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

	A	B	C	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1	Obligation Type	General Project	Specific Project	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
2			Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		<b>Bureau of Reclamation</b>	Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7			Yakima Chandler/Kenniwick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9			Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	<b>Appropriation</b>		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		<b>Corps of Engineers</b>	Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		<b>Lower Snake Fish &amp; Wildlife</b>	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31		<b>Appropriation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32			<b>Bureau Direct</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			<b>Conservation</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			<b>Construction (AS)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		<b>BPA Borrowing</b>	<b>Corps</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			<b>Fish and Wildlife</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	<b>Bond</b>		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			<b>Technology (G)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			<b>BPA Borrowing Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51			Replacements	551,694	559,820	592,491	655,689	460,791	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900
52		<b>Federal Generation Replacements</b>	Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54			<b>Federal Generation Replacements Subtotal:</b>	<b>551,694</b>	<b>559,820</b>	<b>592,491</b>	<b>655,689</b>	<b>460,791</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>
55			Discounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56		<b>Make Whole Call</b>	Premiums	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57			<b>Make Whole Call Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58		<b>Bond Subtotal:</b>		551,694	559,820	592,491	655,689	460,791	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900
59		<b>Irrigation Assistance</b>	Irrigation Assistance	7,766	28,920	15,710	-	14,069	-	73,659	-	-	-	11,586	-	-	-	-	-	-	-	-
60	<b>Irrigation</b>		<b>Irrigation Assistance Subtotal:</b>	<b>7,766</b>	<b>28,920</b>	<b>15,710</b>	<b>-</b>	<b>14,069</b>	<b>-</b>	<b>73,659</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11,586</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
61			Irrigation Subtotal:	7,766	28,920	15,710	-	14,069	-	73,659	-	-	-	11,586	-	-	-	-	-	-	-	-
62	<b>Grand Total:</b>			<b>\$559,460</b>	<b>\$588,741</b>	<b>\$608,201</b>	<b>\$655,689</b>	<b>\$474,861</b>	<b>\$197,900</b>	<b>\$271,559</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$209,487</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>

**TABLE 11F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
(\$000s) (FY 2020)

1	A	B	C	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	
	Obligation Type	General Project	Specific Project	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	Total	
2			Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,765
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,434
5		<b>Bureau of Reclamation</b>	Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,585
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
7			Yakima Chandler/Kenniwick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>34,050</b>
9			Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,739
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,269
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,314,178
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,813
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	576
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,390
16	<b>Appropriation</b>		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	638
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154
18		<b>Corps of Engineers</b>	Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,502
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,021
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,056
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,987
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	311
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,977
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,244
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,869
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,010
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>1,437,840</b>
29		<b>Lower Snake Fish &amp; Wildlife</b>	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,206
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>5,206</b>
31		<b>Appropriation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,477,096
32			<b>Bureau Direct</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,162,306
33			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			<b>Conservation</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349,000
36			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			<b>Construction (AS)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46,350
39			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		<b>BPA Borrowing</b>	<b>Corps</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	485,630
42			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			<b>Fish and Wildlife</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	399,928
45	<b>Bond</b>		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			<b>Technology (G)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45,000
48			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			<b>BPA Borrowing Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>2,488,215</b>
51			Replacements	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	9,697,121
52		<b>Federal Generation Replacements</b>	Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54			<b>Federal Generation Replacements Subtotal:</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>197,900</b>	<b>9,697,121</b>
55			Discounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(57,335)
56		<b>Make Whole Call</b>	Premiums	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,206
57			<b>Make Whole Call Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>(34,130)</b>
58		<b>Bond Subtotal:</b>		197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	197,900	12,242,671
59		<b>Irrigation Assistance</b>	Irrigation Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,988
60	<b>Irrigation</b>		<b>Irrigation Assistance Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>363,988</b>
61		<b>Irrigation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,988
62	<b>Grand Total:</b>			<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$197,900</b>	<b>\$14,083,754</b>

**12. REPAYMENT STUDY DATA, FY 2021 STUDY**

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1	Albeni Falls	09/1955	09/2005	6.910%	25,494	0		
2	Albeni Falls	09/1956	09/2005	6.910%	11	0		
3	Albeni Falls	09/1957	09/2005	6.910%	10	0		
4	Albeni Falls	09/1958	09/2005	6.910%	11	0		
5	Albeni Falls	09/1959	09/2005	6.910%	11	0		
6	Albeni Falls	09/1960	09/2005	6.910%	10	0		
7	Albeni Falls	09/1961	09/2005	6.910%	11	0		
8	Albeni Falls	09/1962	09/2005	6.910%	11	0		
9	Albeni Falls	09/1963	09/2005	6.910%	10	0		
10	Albeni Falls	09/1964	09/2005	6.910%	11	0		
11	Albeni Falls	09/1965	09/2005	6.910%	11	0		
12	Albeni Falls	09/1966	09/2005	6.910%	10	0		
13	Albeni Falls	09/1967	09/2005	6.910%	11	0		
14	Albeni Falls	09/1968	09/2005	6.910%	11	0		
15	Albeni Falls	09/1969	09/2005	6.910%	10	0		
16	Albeni Falls	09/1970	09/2005	6.910%	11	0		
17	Albeni Falls	09/1971	09/2005	6.910%	11	0		
18	Albeni Falls	09/1972	09/2005	6.910%	10	0		
19	Albeni Falls	09/1973	09/2005	6.910%	11	0		
20	Albeni Falls	09/1974	09/2005	6.910%	11	0		
21	Albeni Falls	09/1975	09/2005	6.910%	10	0		
22	Albeni Falls	09/1976	09/2005	6.910%	11	0		
23	Albeni Falls	09/1977	09/2005	6.910%	11	0		
24	Albeni Falls	09/1978	09/2005	6.910%	10	0		
25	Albeni Falls	09/1979	09/2005	6.910%	11	0		
26	Albeni Falls	09/1980	09/2005	6.910%	11	0		
27	Albeni Falls	09/1981	09/2005	6.910%	10	0		
28	Albeni Falls	09/1982	09/2005	6.910%	11	0		
29	Albeni Falls	09/1983	09/2005	6.910%	11	0		
30	Albeni Falls	09/1985	09/2005	6.910%	7	0		
31	Albeni Falls	09/1986	09/2005	6.910%	293	0		
32	Albeni Falls	09/1987	09/2005	6.910%	12	0		
33	Albeni Falls	09/1987	09/2005	8.888%	15	0		
34	Albeni Falls	09/1988	09/2005	8.500%	328	0		
35	Albeni Falls	09/1989	09/2005	9.250%	221	0		
36	Albeni Falls	09/1990	09/2005	8.875%	1,287	0		
37	Albeni Falls	09/1991	09/2005	8.750%	43	0		
38	Albeni Falls	09/1991	09/2005	8.750%	111	0		
39	Albeni Falls	09/1992	09/2005	8.500%	7	0		
40	Albeni Falls	09/1992	09/2005	8.500%	106	0		
41	Albeni Falls	09/1993	09/2005	7.875%	295	0		
42	Albeni Falls	09/1993	09/2005	7.875%	714	0		
43	Albeni Falls	09/1994	09/2019	7.125%	61	0		
44	Albeni Falls	09/1994	09/2019	7.125%	173	0		
45	Albeni Falls	09/1995	09/2010	7.090%	17	0		
46	Albeni Falls	09/1995	09/2010	7.890%	51	0		
47	Albeni Falls	09/1995	09/2045	7.150%	1,105	0		
48	Albeni Falls	09/1995	09/2045	7.150%	443	0		
49	Albeni Falls	09/1995	09/2045	7.150%	531	0		
50	Albeni Falls	09/1996	09/2016	7.290%	130	0		
51	Albeni Falls	09/1997	09/2047	7.150%	431	0		
52	Albeni Falls	09/2005	09/2055	5.125%	481	0		
53	Albeni Falls	09/2009	09/2059	4.375%	57	57		
54	Albeni Falls	09/2010	09/2060	4.250%	42	42		
55	Boise	09/1912	09/1962	3.000%	1,249	0		
56	Boise	09/1912	09/1962	3.000%	285	0		
57	Boise	09/1926	09/1976	3.000%	190	0		
58	Boise	09/1926	09/1976	3.000%	832	0		
59	Boise	09/1950	09/2000	3.000%	416	0		
60	Boise	09/1950	09/2000	3.000%	95	0		
61	Boise	09/1951	09/2001	3.000%	1,873	0		
62	Boise	09/1951	09/2001	3.000%	428	0		
63	Boise	09/1952	09/2001	3.000%	11	0		
64	Boise	09/1952	09/2001	3.000%	3	0		
65	Boise	09/1953	09/2001	3.000%	11	0		
66	Boise	09/1953	09/2001	3.000%	3	0		
67	Boise	09/1954	09/2001	3.000%	11	0		
68	Boise	09/1954	09/2001	3.000%	3	0		
69	Boise	09/1955	09/2001	3.000%	11	0		
70	Boise	09/1955	09/2001	3.000%	3	0		
71	Boise	09/1956	09/2001	3.000%	11	0		
72	Boise	09/1956	09/2001	3.000%	3	0		
73	Boise	09/1957	09/2001	3.000%	11	0		
74	Boise	09/1957	09/2001	3.000%	3	0		
75	Boise	09/1958	09/2001	3.000%	11	0		
76	Boise	09/1958	09/2001	3.000%	3	0		
77	Boise	09/1959	09/2001	3.000%	11	0		
78	Boise	09/1959	09/2001	3.000%	3	0		
79	Boise	09/1960	09/2001	3.000%	11	0		
80	Boise	09/1960	09/2001	3.000%	3	0		
81	Boise	09/1961	09/2001	3.000%	11	0		
82	Boise	09/1961	09/2001	3.000%	3	0		

**TABLE 12A:**  
**HISTORICAL INVESTMENTS**  
**October 1, 2018 - September 30, 2021 Cost Evaluation period**  
**(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
83	Boise	09/1962	09/2001	3.000%	11	0		
84	Boise	09/1962	09/2001	3.000%	3	0		
85	Boise	09/1963	09/2001	3.000%	11	0		
86	Boise	09/1963	09/2001	3.000%	3	0		
87	Boise	09/1964	09/2001	3.000%	11	0		
88	Boise	09/1964	09/2001	3.000%	3	0		
89	Boise	09/1965	09/2001	3.000%	11	0		
90	Boise	09/1965	09/2001	3.000%	3	0		
91	Boise	09/1966	09/2001	3.000%	11	0		
92	Boise	09/1966	09/2001	3.000%	3	0		
93	Boise	09/1967	09/2001	3.000%	11	0		
94	Boise	09/1967	09/2001	3.000%	3	0		
95	Boise	09/1968	09/2001	3.000%	11	0		
96	Boise	09/1968	09/2001	3.000%	3	0		
97	Boise	09/1969	09/2001	3.000%	11	0		
98	Boise	09/1969	09/2001	3.000%	3	0		
99	Boise	09/1970	09/2001	3.000%	11	0		
100	Boise	09/1970	09/2001	3.000%	3	0		
101	Boise	09/1971	09/2001	3.000%	11	0		
102	Boise	09/1971	09/2001	3.000%	3	0		
103	Boise	09/1972	09/2001	3.000%	11	0		
104	Boise	09/1972	09/2001	3.000%	3	0		
105	Boise	09/1973	09/2001	3.000%	11	0		
106	Boise	09/1973	09/2001	3.000%	3	0		
107	Boise	09/1974	09/2001	3.000%	11	0		
108	Boise	09/1974	09/2001	3.000%	3	0		
109	Boise	09/1975	09/2001	3.000%	11	0		
110	Boise	09/1975	09/2001	3.000%	3	0		
111	Boise	09/1976	09/2001	3.000%	11	0		
112	Boise	09/1976	09/2001	3.000%	3	0		
113	Boise	09/1977	09/2001	3.000%	11	0		
114	Boise	09/1977	09/2001	3.000%	3	0		
115	Boise	09/1978	09/2001	3.000%	11	0		
116	Boise	09/1978	09/2001	3.000%	3	0		
117	Boise	09/1979	09/2001	3.000%	11	0		
118	Boise	09/1979	09/2001	3.000%	3	0		
119	Boise	09/1980	09/2001	3.000%	18	0		
120	Boise	09/1980	09/2001	3.000%	4	0		
121	Boise	09/1981	09/2001	3.000%	8	0		
122	Boise	09/1981	09/2001	3.000%	2	0		
123	Boise	09/1982	09/2001	3.000%	1	0		
124	Boise	09/1982	09/2001	3.000%	1	0		
125	Boise	09/1983	09/2001	3.000%	1	0		
126	Boise	09/1984	09/2001	10.750%	1,325	0		
127	Boise	09/1984	09/2001	10.750%	303	0		
128	Boise	09/1986	09/2001	6.710%	94	0		
129	Boise	09/1988	09/2001	8.500%	3	0		
130	Boise	09/1989	09/2001	9.250%	3,264	0		
131	Boise	09/1990	09/2001	8.875%	38	0		
132	Boise	09/1991	09/2001	8.750%	50	0		
133	Boise	09/1993	09/2001	7.875%	418	0		
134	Boise	09/1994	09/1999	7.125%	7	0		
135	Boise	09/1996	09/2046	6.950%	7	0		
136	Boise	09/1996	09/2046	7.150%	442	0		
137	Boise	09/1996	09/2046	7.150%	656	0		
138	Boise	09/1997	09/2047	6.950%	9	0		
139	Boise	09/1997	09/2047	7.150%	2,266	0		
140	Boise	09/2005	09/2055	5.125%	903	0		
141	Boise	09/2006	09/2056	4.500%	15	15		
142	Boise	09/2007	09/2057	5.000%	76	0		
143	Boise	09/2008	09/2058	4.875%	64	64		
144	Boise	09/2009	09/2059	4.375%	2	2		
145	Boise	09/2015	09/2065	3.250%	0	0		
146	Boise	09/2016	09/2066	3.000%	118	118		
147	Bonneville 2nd Powerhouse	09/1981	09/2031	7.150%	40,964	0		
148	Bonneville 2nd Powerhouse	09/1981	09/2031	7.150%	455	0		
149	Bonneville 2nd Powerhouse	09/1982	09/2032	7.150%	203,535	0		
150	Bonneville 2nd Powerhouse	09/1982	09/2032	7.150%	2,264	0		
151	Bonneville 2nd Powerhouse	09/1983	09/2033	7.150%	62,409	0		
152	Bonneville 2nd Powerhouse	09/1983	09/2033	7.150%	694	0		
153	Bonneville 2nd Powerhouse	09/1985	09/2033	7.150%	9,138	0		
154	Bonneville 2nd Powerhouse	09/1986	09/2033	7.150%	30,578	0		
155	Bonneville 2nd Powerhouse	09/1987	09/2033	7.150%	2,801	0		
156	Bonneville 2nd Powerhouse	09/1988	09/2033	7.150%	1,271	0		
157	Bonneville 2nd Powerhouse	09/1989	09/2033	7.150%	1,232	0		
158	Bonneville 2nd Powerhouse	09/1990	09/2033	7.150%	1,588	0		
159	Bonneville 2nd Powerhouse	09/1991	09/2033	8.750%	3,998	0		
160	Bonneville 2nd Powerhouse	09/1991	09/2033	8.750%	26	0		
161	Bonneville 2nd Powerhouse	09/1992	09/2033	8.500%	2,446	0		
162	Bonneville 2nd Powerhouse	09/1993	09/2033	7.875%	3,668	0		
163	Bonneville 2nd Powerhouse	09/1994	09/2044	7.150%	5,700	0		
164	Bonneville 2nd Powerhouse	09/1995	09/2045	7.150%	3,791	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
165	Bonneville 2nd Powerhouse	09/1996	09/2046	7.150%	376	0		
166	Bonneville Dam	09/1938	09/1988	2.500%	11,726	0		
167	Bonneville Dam	09/1938	09/1988	2.500%	130	0		
168	Bonneville Dam	09/1941	09/1991	2.500%	17,589	0		
169	Bonneville Dam	09/1941	09/1991	2.500%	196	0		
170	Bonneville Dam	09/1942	09/1992	2.500%	5,863	0		
171	Bonneville Dam	09/1942	09/1992	2.500%	65	0		
172	Bonneville Dam	09/1943	09/1993	2.500%	17,589	0		
173	Bonneville Dam	09/1943	09/1993	2.500%	196	0		
174	Bonneville Dam	09/1944	09/1994	2.500%	5,860	0		
175	Bonneville Dam	09/1944	09/1994	2.500%	65	0		
176	Bonneville Dam	09/1945	09/1994	2.500%	82	0		
177	Bonneville Dam	09/1945	09/1994	2.500%	1	0		
178	Bonneville Dam	09/1946	09/1994	2.500%	81	0		
179	Bonneville Dam	09/1946	09/1994	2.500%	1	0		
180	Bonneville Dam	09/1947	09/1994	2.500%	82	0		
181	Bonneville Dam	09/1947	09/1994	2.500%	1	0		
182	Bonneville Dam	09/1948	09/1994	2.500%	81	0		
183	Bonneville Dam	09/1948	09/1994	2.500%	1	0		
184	Bonneville Dam	09/1949	09/1994	2.500%	82	0		
185	Bonneville Dam	09/1949	09/1994	2.500%	1	0		
186	Bonneville Dam	09/1950	09/1994	2.500%	81	0		
187	Bonneville Dam	09/1950	09/1994	2.500%	11	0		
188	Bonneville Dam	09/1951	09/1994	2.500%	81	0		
189	Bonneville Dam	09/1951	09/1994	2.500%	11	0		
190	Bonneville Dam	09/1952	09/1994	2.500%	82	0		
191	Bonneville Dam	09/1952	09/1994	2.500%	1	0		
192	Bonneville Dam	09/1953	09/1994	2.500%	81	0		
193	Bonneville Dam	09/1953	09/1994	2.500%	1	0		
194	Bonneville Dam	09/1954	09/1994	2.500%	82	0		
195	Bonneville Dam	09/1954	09/1994	2.500%	1	0		
196	Bonneville Dam	09/1955	09/1994	2.500%	81	0		
197	Bonneville Dam	09/1955	09/1994	2.500%	1	0		
198	Bonneville Dam	09/1956	09/1994	2.500%	81	0		
199	Bonneville Dam	09/1956	09/1994	2.500%	1	0		
200	Bonneville Dam	09/1957	09/1994	2.500%	82	0		
201	Bonneville Dam	09/1957	09/1994	2.500%	1	0		
202	Bonneville Dam	09/1958	09/1994	2.500%	81	0		
203	Bonneville Dam	09/1958	09/1994	2.500%	1	0		
204	Bonneville Dam	09/1959	09/1994	2.500%	82	0		
205	Bonneville Dam	09/1959	09/1994	2.500%	1	0		
206	Bonneville Dam	09/1960	09/1994	2.500%	81	0		
207	Bonneville Dam	09/1960	09/1994	2.500%	1	0		
208	Bonneville Dam	09/1961	09/1994	2.500%	81	0		
209	Bonneville Dam	09/1961	09/1994	2.500%	1	0		
210	Bonneville Dam	09/1962	09/1994	2.500%	82	0		
211	Bonneville Dam	09/1962	09/1994	2.500%	1	0		
212	Bonneville Dam	09/1963	09/1994	2.500%	81	0		
213	Bonneville Dam	09/1963	09/1994	2.500%	1	0		
214	Bonneville Dam	09/1964	09/1994	2.500%	82	0		
215	Bonneville Dam	09/1964	09/1994	2.500%	1	0		
216	Bonneville Dam	09/1965	09/1994	2.500%	81	0		
217	Bonneville Dam	09/1965	09/1994	2.500%	1	0		
218	Bonneville Dam	09/1966	09/1994	2.500%	81	0		
219	Bonneville Dam	09/1966	09/1994	2.500%	1	0		
220	Bonneville Dam	09/1967	09/1994	2.500%	82	0		
221	Bonneville Dam	09/1967	09/1994	2.500%	1	0		
222	Bonneville Dam	09/1968	09/1994	2.500%	81	0		
223	Bonneville Dam	09/1968	09/1994	2.500%	1	0		
224	Bonneville Dam	09/1969	09/1994	2.500%	82	0		
225	Bonneville Dam	09/1969	09/1994	2.500%	1	0		
226	Bonneville Dam	09/1970	09/1994	2.500%	81	0		
227	Bonneville Dam	09/1970	09/1994	2.500%	1	0		
228	Bonneville Dam	09/1971	09/1994	2.500%	81	0		
229	Bonneville Dam	09/1971	09/1994	2.500%	1	0		
230	Bonneville Dam	09/1972	09/1994	2.500%	82	0		
231	Bonneville Dam	09/1972	09/1994	2.500%	1	0		
232	Bonneville Dam	09/1973	09/1994	2.500%	81	0		
233	Bonneville Dam	09/1973	09/1994	2.500%	1	0		
234	Bonneville Dam	09/1974	09/1994	2.500%	82	0		
235	Bonneville Dam	09/1974	09/1994	2.500%	1	0		
236	Bonneville Dam	09/1975	09/1994	2.500%	81	0		
237	Bonneville Dam	09/1975	09/1994	2.500%	1	0		
238	Bonneville Dam	09/1976	09/1994	2.500%	81	0		
239	Bonneville Dam	09/1976	09/1994	2.500%	1	0		
240	Bonneville Dam	09/1977	09/1994	2.500%	82	0		
241	Bonneville Dam	09/1977	09/1994	2.500%	1	0		
242	Bonneville Dam	09/1977	09/2027	7.150%	15,670	0		
243	Bonneville Dam	09/1978	09/1994	2.500%	81	0		
244	Bonneville Dam	09/1978	09/1994	2.500%	1	0		
245	Bonneville Dam	09/1979	09/1994	2.500%	82	0		
246	Bonneville Dam	09/1979	09/1994	2.500%	1	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
247	Bonneville Dam	09/1980	09/1994	2.500%	81	0		
248	Bonneville Dam	09/1980	09/1994	2.500%	1	0		
249	Bonneville Dam	09/1981	09/1994	2.500%	81	0		
250	Bonneville Dam	09/1981	09/1994	2.500%	1	0		
251	Bonneville Dam	09/1982	09/1994	2.500%	82	0		
252	Bonneville Dam	09/1982	09/1994	2.500%	2	0		
253	Bonneville Dam	09/1983	09/1994	2.500%	81	0		
254	Bonneville Dam	09/1983	09/1994	2.500%	1	0		
255	Bonneville Dam	09/1984	09/1994	10.750%	873	0		
256	Bonneville Dam	09/1984	09/1994	10.750%	10	0		
257	Bonneville Dam	09/1985	09/1994	2.500%	119	0		
258	Bonneville Dam	09/1986	09/1994	2.500%	555	0		
259	Bonneville Dam	09/1986	09/1994	11.375%	454	0		
260	Bonneville Dam	09/1987	09/1994	2.500%	260	0		
261	Bonneville Dam	09/1987	09/1994	8.875%	26	0		
262	Bonneville Dam	09/1988	09/1994	8.500%	4,199	0		
263	Bonneville Dam	09/1988	09/1994	8.500%	10	0		
264	Bonneville Dam	09/1989	09/1994	9.250%	877	0		
265	Bonneville Dam	09/1990	09/1994	8.875%	519	0		
266	Bonneville Dam	09/1990	09/1994	8.875%	651	0		
267	Bonneville Dam	09/1991	09/1994	8.750%	35	0		
268	Bonneville Dam	09/1991	09/1994	8.750%	3,193	0		
269	Bonneville Dam	09/1992	09/1994	8.500%	99	0		
270	Bonneville Dam	09/1992	09/1994	8.500%	25	0		
271	Bonneville Dam	09/1993	09/2018	7.880%	5,011	0		
272	Bonneville Dam	09/1994	09/2029	7.125%	536	0		
273	Bonneville Dam	09/1995	09/2000	7.330%	8	0		
274	Bonneville Dam	09/1995	09/2010	7.090%	25	0		
275	Bonneville Dam	09/1995	09/2020	7.250%	20	0		
276	Bonneville Dam	09/1995	09/2020	7.250%	22	0		
277	Bonneville Dam	09/1995	09/2030	7.860%	53	0		
278	Bonneville Dam	09/1995	09/2035	7.860%	98	0		
279	Bonneville Dam	09/1995	09/2045	7.150%	243	0		
280	Bonneville Dam	09/1995	09/2045	7.150%	410	0		
281	Bonneville Dam	09/1995	09/2045	7.150%	440	0		
282	Bonneville Dam	09/1995	09/2045	7.860%	374	0		
283	Bonneville Dam	09/1996	09/2016	7.290%	834	0		
284	Bonneville Dam	09/1996	09/2031	7.150%	22	0		
285	Bonneville Dam	09/1996	09/2046	7.150%	18	0		
286	Bonneville Dam	09/1996	09/2046	7.150%	18	0		
287	Bonneville Dam	09/1996	09/2046	7.150%	80	0		
288	Bonneville Dam	09/1996	09/2046	7.150%	109	0		
289	Bonneville Dam	09/1996	09/2046	7.150%	142	0		
290	Bonneville Dam	09/1996	09/2046	7.150%	223	0		
291	Bonneville Dam	09/1996	09/2046	7.150%	751	0		
292	Bonneville Dam	09/1996	09/2046	7.150%	1,322	0		
293	Bonneville Dam	09/1997	09/2022	7.230%	122	0		
294	Bonneville Dam	09/1997	09/2032	7.150%	518	0		
295	Bonneville Dam	09/1997	09/2047	7.150%	161	0		
296	Bonneville Dam	09/1999	09/2049	5.375%	19,368	0		
297	Bonneville Dam	09/2000	09/2050	6.125%	24,446	0		
298	Bonneville Dam	09/2001	09/2051	5.875%	2,530	0		
299	Bonneville Dam	09/2002	09/2052	5.500%	448	0		
300	Bonneville Dam	09/2003	09/2053	5.125%	4,581	0		
301	Bonneville Dam	09/2004	09/2054	5.375%	26,741	0		
302	Bonneville Dam	09/2005	09/2055	5.125%	19,725	0		
303	Bonneville Dam	09/2006	09/2056	4.500%	2,628	2,628		
304	Bonneville Dam	09/2007	09/2057	5.000%	1,124	0		
305	Bonneville Dam	09/2008	09/2058	4.875%	14,609	14,609		
306	Bonneville Dam	09/2009	09/2059	4.375%	2,744	2,744		
307	Bonneville Dam	09/2010	09/2060	4.250%	1,425	1,425		
308	Bonneville Dam	09/2011	09/2061	3.750%	10,962	10,962		
309	Bonneville Dam	09/2013	09/2063	2.875%	268	268		
310	Bonneville Dam	09/2014	09/2064	3.875%				
311	Bonneville Dam	09/2015	09/2065	3.250%	102	102		
312	Chief Joseph	09/1955	09/2005	6.910%	29,164	0		
313	Chief Joseph	09/1956	09/2006	6.950%	13,643	0		
314	Chief Joseph	09/1957	09/2007	6.980%	39,586	0		
315	Chief Joseph	09/1958	09/2008	7.020%	31,901	0		
316	Chief Joseph	09/1959	09/2008	7.020%	223	0		
317	Chief Joseph	09/1960	09/2008	7.020%	223	0		
318	Chief Joseph	09/1961	09/2008	7.020%	223	0		
319	Chief Joseph	09/1962	09/2008	7.020%	223	0		
320	Chief Joseph	09/1963	09/2008	7.020%	224	0		
321	Chief Joseph	09/1964	09/2008	7.020%	223	0		
322	Chief Joseph	09/1965	09/2008	7.020%	223	0		
323	Chief Joseph	09/1966	09/2008	7.020%	223	0		
324	Chief Joseph	09/1967	09/2008	7.020%	223	0		
325	Chief Joseph	09/1968	09/2008	7.020%	224	0		
326	Chief Joseph	09/1969	09/2008	7.020%	223	0		
327	Chief Joseph	09/1970	09/2008	7.020%	223	0		
328	Chief Joseph	09/1971	09/2008	7.020%	223	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
329	Chief Joseph	09/1972	09/2008	7.020%	223	0		
330	Chief Joseph	09/1973	09/2008	7.020%	224	0		
331	Chief Joseph	09/1974	09/2008	7.020%	223	0		
332	Chief Joseph	09/1975	09/2008	7.020%	223	0		
333	Chief Joseph	09/1976	09/2008	7.020%	223	0		
334	Chief Joseph	09/1977	09/2008	7.020%	223	0		
335	Chief Joseph	09/1977	09/2027	7.150%	30,512	0		
336	Chief Joseph	09/1978	09/2008	7.020%	224	0		
337	Chief Joseph	09/1978	09/2028	7.150%	75,669	0		
338	Chief Joseph	09/1979	09/2008	7.020%	223	0		
339	Chief Joseph	09/1979	09/2029	7.150%	60,079	0		
340	Chief Joseph	09/1980	09/2008	7.020%	223	0		
341	Chief Joseph	09/1981	09/2008	7.020%	223	0		
342	Chief Joseph	09/1982	09/2008	7.020%	223	0		
343	Chief Joseph	09/1983	09/2008	7.020%	224	0		
344	Chief Joseph	09/1984	09/2008	10.750%	909	0		
345	Chief Joseph	09/1985	09/2008	7.020%	46	0		
346	Chief Joseph	09/1985	09/2029	7.150%	16,372	0		
347	Chief Joseph	09/1986	09/2029	7.150%	5,363	0		
348	Chief Joseph	09/1987	09/2008	8.875%	104	0		
349	Chief Joseph	09/1987	09/2029	7.150%	3,036	0		
350	Chief Joseph	09/1988	09/2029	7.150%	2,722	0		
351	Chief Joseph	09/1989	09/2008	9.250%	327	0		
352	Chief Joseph	09/1989	09/2029	7.150%	2,227	0		
353	Chief Joseph	09/1990	09/2008	8.875%	1,024	0		
354	Chief Joseph	09/1990	09/2029	7.150%	4,505	0		
355	Chief Joseph	09/1991	09/2008	8.750%	34	0		
356	Chief Joseph	09/1991	09/2008	8.750%	293	0		
357	Chief Joseph	09/1991	09/2029	8.750%	3,840	0		
358	Chief Joseph	09/1992	09/2008	8.500%	142	0		
359	Chief Joseph	09/1992	09/2008	8.500%	717	0		
360	Chief Joseph	09/1992	09/2029	8.500%	2,032	0		
361	Chief Joseph	09/1993	09/2008	7.875%	42	0		
362	Chief Joseph	09/1993	09/2008	7.875%	794	0		
363	Chief Joseph	09/1993	09/2029	7.875%	1,360	0		
364	Chief Joseph	09/1994	09/2029	7.125%	129	0		
365	Chief Joseph	09/1994	09/2029	7.125%	65	0		
366	Chief Joseph	09/1994	09/2044	7.150%	4,280	0		
367	Chief Joseph	09/1995	09/2010	7.090%	15	0		
368	Chief Joseph	09/1995	09/2045	7.150%	147	0		
369	Chief Joseph	09/1995	09/2045	7.150%	562	0		
370	Chief Joseph	09/1995	09/2045	7.150%	712	0		
371	Chief Joseph	09/1995	09/2045	7.150%	784	0		
372	Chief Joseph	09/1996	09/2031	7.150%	27	0		
373	Chief Joseph	09/1996	09/2046	7.150%	3	0		
374	Chief Joseph	09/1996	09/2046	7.150%	4	0		
375	Chief Joseph	09/1996	09/2046	7.150%	355	0		
376	Chief Joseph	09/1996	09/2046	7.150%	729	0		
377	Chief Joseph	09/1997	09/2032	7.150%	166	0		
378	Chief Joseph	09/1997	09/2047	7.150%	657	0		
379	Chief Joseph	09/2001	09/2051	5.875%	345	0		
380	Chief Joseph	09/2002	09/2052	5.500%	2	0		
381	Chief Joseph	09/2003	09/2053	5.125%	992	0		
382	Chief Joseph	09/2008	09/2058	4.875%	3,500	3,500		
383	Chief Joseph	09/2009	09/2059	4.375%	24,727	24,727		
384	Chief Joseph	09/2011	09/2061	3.750%	4	4		
385	Chief Joseph	09/2012	09/2062	3.375%	28	28		
386	Chief Joseph	09/2013	09/2063	2.875%	10	10		
387	Columbia Basin	09/1941	09/1991	3.000%	10,919	0		
388	Columbia Basin	09/1941	09/1991	3.000%	1,505	0		
389	Columbia Basin	09/1942	09/1992	3.000%	16,165	0		
390	Columbia Basin	09/1942	09/1992	3.000%	3,011	0		
391	Columbia Basin	09/1943	09/1993	3.000%	8,083	0		
392	Columbia Basin	09/1943	09/1993	3.000%	1,505	0		
393	Columbia Basin	09/1944	09/1994	3.000%	16,165	0		
394	Columbia Basin	09/1944	09/1994	3.000%	3,011	0		
395	Columbia Basin	09/1948	09/1998	3.000%	24,247	0		
396	Columbia Basin	09/1948	09/1998	3.000%	4,516	0		
397	Columbia Basin	09/1949	09/1999	3.000%	24,247	0		
398	Columbia Basin	09/1949	09/1999	3.000%	4,516	0		
399	Columbia Basin	09/1950	09/2000	3.000%	16,165	0		
400	Columbia Basin	09/1950	09/2000	3.000%	3,011	0		
401	Columbia Basin	09/1951	09/2001	6.710%	28,255	0		
402	Columbia Basin	09/1951	09/2001	6.710%	5,790	0		
403	Columbia Basin	09/1952	09/2001	6.710%	258	0		
404	Columbia Basin	09/1952	09/2001	6.710%	48	0		
405	Columbia Basin	09/1953	09/2001	6.710%	258	0		
406	Columbia Basin	09/1953	09/2001	6.710%	48	0		
407	Columbia Basin	09/1954	09/2001	6.710%	258	0		
408	Columbia Basin	09/1954	09/2001	6.710%	48	0		
409	Columbia Basin	09/1955	09/2001	6.710%	258	0		
410	Columbia Basin	09/1955	09/2001	6.710%	48	0		



**TABLE 12A:**  
**HISTORICAL INVESTMENTS**  
**October 1, 2018 - September 30, 2021 Cost Evaluation period**  
**(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
411	Columbia Basin	09/1956	09/2001	6.710%	259	0		
412	Columbia Basin	09/1956	09/2001	6.710%	48	0		
413	Columbia Basin	09/1957	09/2001	6.710%	258	0		
414	Columbia Basin	09/1957	09/2001	6.710%	48	0		
415	Columbia Basin	09/1958	09/2001	6.710%	258	0		
416	Columbia Basin	09/1958	09/2001	6.710%	48	0		
417	Columbia Basin	09/1959	09/2001	6.710%	258	0		
418	Columbia Basin	09/1959	09/2001	6.710%	48	0		
419	Columbia Basin	09/1960	09/2001	6.710%	258	0		
420	Columbia Basin	09/1960	09/2001	6.710%	48	0		
421	Columbia Basin	09/1961	09/2001	6.710%	259	0		
422	Columbia Basin	09/1961	09/2001	6.710%	48	0		
423	Columbia Basin	09/1962	09/2001	6.710%	258	0		
424	Columbia Basin	09/1962	09/2001	6.710%	48	0		
425	Columbia Basin	09/1963	09/2001	6.710%	258	0		
426	Columbia Basin	09/1963	09/2001	6.710%	48	0		
427	Columbia Basin	09/1964	09/2001	6.710%	258	0		
428	Columbia Basin	09/1964	09/2001	6.710%	48	0		
429	Columbia Basin	09/1965	09/2001	6.710%	258	0		
430	Columbia Basin	09/1965	09/2001	6.710%	48	0		
431	Columbia Basin	09/1966	09/2001	6.710%	259	0		
432	Columbia Basin	09/1966	09/2001	6.710%	48	0		
433	Columbia Basin	09/1967	09/2001	6.710%	258	0		
434	Columbia Basin	09/1967	09/2001	6.710%	48	0		
435	Columbia Basin	09/1967	09/2017	7.290%	758	0		
436	Columbia Basin	09/1968	09/2001	6.710%	258	0		
437	Columbia Basin	09/1968	09/2001	6.710%	48	0		
438	Columbia Basin	09/1969	09/2001	6.710%	258	0		
439	Columbia Basin	09/1969	09/2001	6.710%	48	0		
440	Columbia Basin	09/1970	09/2001	6.710%	258	0		
441	Columbia Basin	09/1970	09/2001	6.710%	48	0		
442	Columbia Basin	09/1971	09/2001	6.710%	259	0		
443	Columbia Basin	09/1971	09/2001	6.710%	48	0		
444	Columbia Basin	09/1972	09/2001	6.710%	258	0		
445	Columbia Basin	09/1972	09/2001	6.710%	48	0		
446	Columbia Basin	09/1973	09/2001	6.710%	258	0		
447	Columbia Basin	09/1973	09/2001	6.710%	48	0		
448	Columbia Basin	09/1974	09/2001	6.710%	258	0		
449	Columbia Basin	09/1974	09/2001	6.710%	48	0		
450	Columbia Basin	09/1975	09/2001	6.710%	258	0		
451	Columbia Basin	09/1975	09/2001	6.710%	48	0		
452	Columbia Basin	09/1976	09/2001	6.710%	259	0		
453	Columbia Basin	09/1976	09/2001	6.710%	48	0		
454	Columbia Basin	09/1977	09/2001	6.710%	258	0		
455	Columbia Basin	09/1977	09/2001	6.710%	48	0		
456	Columbia Basin	09/1978	09/2001	6.710%	258	0		
457	Columbia Basin	09/1978	09/2001	6.710%	48	0		
458	Columbia Basin	09/1979	09/2001	6.710%	258	0		
459	Columbia Basin	09/1979	09/2001	6.710%	48	0		
460	Columbia Basin	09/1980	09/2001	6.710%	258	0		
461	Columbia Basin	09/1980	09/2001	6.710%	48	0		
462	Columbia Basin	09/1981	09/2001	6.710%	259	0		
463	Columbia Basin	09/1981	09/2001	6.710%	48	0		
464	Columbia Basin	09/1982	09/2001	6.710%	258	0		
465	Columbia Basin	09/1982	09/2001	6.710%	48	0		
466	Columbia Basin	09/1983	09/2001	6.710%	258	0		
467	Columbia Basin	09/1983	09/2001	6.710%	48	0		
468	Columbia Basin	09/1984	09/2001	10.750%	7,815	0		
469	Columbia Basin	09/1984	09/2001	10.750%	1,455	0		
470	Columbia Basin	09/1985	09/2001	6.710%	236	0		
471	Columbia Basin	09/1985	09/2001	6.710%	11	0		
472	Columbia Basin	09/1985	09/2001	12.375%	7,338	0		
473	Columbia Basin	09/1985	09/2001	12.375%	362	0		
474	Columbia Basin	09/1986	09/2001	6.710%	127	0		
475	Columbia Basin	09/1987	09/2001	6.710%	13	0		
476	Columbia Basin	09/1988	09/2001	8.500%	184	0		
477	Columbia Basin	09/1988	09/2001	8.500%	2	0		
478	Columbia Basin	09/1989	09/2001	9.250%	1,166	0		
479	Columbia Basin	09/1990	09/2001	8.875%	928	0		
480	Columbia Basin	09/1991	09/2001	8.750%	177	0		
481	Columbia Basin	09/1991	09/2001	8.750%	1,661	0		
482	Columbia Basin	09/1992	09/2001	8.500%	445	0		
483	Columbia Basin	09/1992	09/2001	8.500%	652	0		
484	Columbia Basin	09/1993	09/2001	6.710%	792	0		
485	Columbia Basin	09/1995	09/2000	6.620%	25	0		
486	Columbia Basin	09/1995	09/2020	7.250%	206	0		
487	Columbia Basin	09/1995	09/2030	7.150%	25	0		
488	Columbia Basin	09/1995	09/2030	7.860%	270	0		
489	Columbia Basin	09/1995	09/2030	7.860%	321	0		
490	Columbia Basin	09/1995	09/2030	7.860%	323	0		
491	Columbia Basin	09/1995	09/2030	7.860%	20	0		
492	Columbia Basin	09/1995	09/2045	7.150%	287	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
493	Columbia Basin	09/1995	09/2045	7.150%	2,511	0		
494	Columbia Basin	09/1995	09/2045	7.860%	450	0		
495	Columbia Basin	09/1995	09/2045	7.860%	450	0		
496	Columbia Basin	09/1996	09/2026	7.150%	72	0		
497	Columbia Basin	09/1996	09/2031	7.150%	109	0		
498	Columbia Basin	09/1996	09/2031	7.150%	251	0		
499	Columbia Basin	09/1996	09/2046	7.150%	426	0		
500	Columbia Basin	09/1996	09/2046	7.150%	368	0		
501	Columbia Basin	09/1997	09/2047	7.150%	3,393	0		
502	Columbia Basin	09/2001	09/2051	5.875%	69,226	0		
503	Columbia Basin	09/2005	09/2055	5.125%	10,963	0		
504	Columbia Basin	09/2006	09/2056	4.500%	1,987	1,987		
505	Columbia Basin	09/2007	09/2057	5.000%	929	0		
506	Columbia Basin	09/2008	09/2058	4.875%	835	835		
507	Columbia Basin	09/2009	09/2059	4.375%	1,338	1,338		
508	Columbia Basin	09/2010	09/2060	4.250%	877	877		
509	Columbia Basin	09/2011	09/2061	3.750%	1,723	1,723		
510	Columbia Basin	09/2012	09/2062	3.375%	11	11		
511	Columbia Basin	09/2013	09/2063	2.875%	3,078	3,078		
512	Columbia Basin	09/2014	09/2064	3.875%	0	0		
513	Columbia Basin	09/2015	09/2065	3.250%	0	0		
514	Columbia Basin	09/2017	09/2067	2.375%	2,865	2,865		
515	Columbia Basin	09/2018	09/2068	2.750%	52	52		
516	Columbia Basin 3rd Powerhouse	09/1975	09/2025	7.160%	47,328	0		
517	Columbia Basin 3rd Powerhouse	09/1975	09/2025	7.160%	8,702	0		
518	Columbia Basin 3rd Powerhouse	09/1976	09/2026	7.150%	41,330	0		
519	Columbia Basin 3rd Powerhouse	09/1976	09/2026	7.150%	8,037	0		
520	Columbia Basin 3rd Powerhouse	09/1977	09/2027	7.150%	42,764	0		
521	Columbia Basin 3rd Powerhouse	09/1977	09/2027	7.150%	7,964	0		
522	Columbia Basin 3rd Powerhouse	09/1978	09/2028	7.150%	42,399	0		
523	Columbia Basin 3rd Powerhouse	09/1978	09/2028	7.150%	7,896	0		
524	Columbia Basin 3rd Powerhouse	09/1979	09/2029	7.150%	84,118	0		
525	Columbia Basin 3rd Powerhouse	09/1979	09/2029	7.150%	15,666	0		
526	Columbia Basin 3rd Powerhouse	09/1983	09/2033	7.150%	712	0		
527	Columbia Basin 3rd Powerhouse	09/1983	09/2033	7.150%	13,003	0		
528	Columbia Basin 3rd Powerhouse	09/1984	09/2033	7.150%	16,965	0		
529	Columbia Basin 3rd Powerhouse	09/1984	09/2033	7.150%	13,192	0		
530	Columbia Basin 3rd Powerhouse	09/1984	09/2033	7.150%	3,160	0		
531	Columbia Basin 3rd Powerhouse	09/1985	09/2033	7.150%	2,060	0		
532	Columbia Basin 3rd Powerhouse	09/1985	09/2033	7.150%	41,772	0		
533	Columbia Basin 3rd Powerhouse	09/1985	09/2033	7.150%	107	0		
534	Columbia Basin 3rd Powerhouse	09/1986	09/2033	7.150%	1,851	0		
535	Columbia Basin 3rd Powerhouse	09/1986	09/2033	7.150%	15,538	0		
536	Columbia Basin 3rd Powerhouse	09/1987	09/2033	7.150%	1,730	0		
537	Columbia Basin 3rd Powerhouse	09/1987	09/2033	7.150%	14,439	0		
538	Columbia Basin 3rd Powerhouse	09/1988	09/2033	7.150%	2,294	0		
539	Columbia Basin 3rd Powerhouse	09/1988	09/2033	7.150%	4,351	0		
540	Columbia Basin 3rd Powerhouse	09/1989	09/2033	7.150%	10,902	0		
541	Columbia Basin 3rd Powerhouse	09/1990	09/2033	7.150%	6,383	0		
542	Columbia Basin 3rd Powerhouse	09/1994	09/2044	7.150%	12,631	0		
543	Columbia River Fish Mitigation	09/1991	09/2041	8.500%	3,969	0		
544	Columbia River Fish Mitigation	09/1992	09/2042	8.500%	874	0		
545	Columbia River Fish Mitigation	09/1993	09/2043	8.500%	85,846	0		
546	Columbia River Fish Mitigation	09/1994	09/2044	8.500%	39,454	0		
547	Columbia River Fish Mitigation	09/1995	09/2045	7.150%	43,343	0		
548	Columbia River Fish Mitigation	09/1996	09/2046	7.150%	2,431	0		
549	Columbia River Fish Mitigation	09/1999	09/2049	5.375%	14,115	0		
550	Columbia River Fish Mitigation	09/2000	09/2050	6.125%	47,006	0		
551	Columbia River Fish Mitigation	09/2001	09/2051	5.875%	6,168	0		
552	Columbia River Fish Mitigation	09/2002	09/2052	5.500%	8,797	0		
553	Columbia River Fish Mitigation	09/2003	09/2053	5.125%	68,440	0		
554	Columbia River Fish Mitigation	09/2004	09/2054	5.375%	60,581	0		
555	Columbia River Fish Mitigation	09/2005	09/2055	5.125%	52,039	0		
556	Columbia River Fish Mitigation	09/2006	09/2056	4.500%	366,395	366,395		
557	Columbia River Fish Mitigation	09/2007	09/2057	5.000%	53,525	14,765		
558	Columbia River Fish Mitigation	09/2008	09/2058	4.875%	36,554	36,554		
559	Columbia River Fish Mitigation	09/2009	09/2059	4.375%	103,203	103,203		
560	Columbia River Fish Mitigation	09/2010	09/2060	4.250%	56,832	56,832		
561	Columbia River Fish Mitigation	09/2011	09/2061	3.750%	106,014	106,014		
562	Columbia River Fish Mitigation	09/2012	09/2062	3.375%	101,616	101,616		
563	Columbia River Fish Mitigation	09/2013	09/2063	2.875%	95,274	95,274		
564	Columbia River Fish Mitigation	09/2014	09/2064	3.875%	110,071	110,071		
565	Columbia River Fish Mitigation	09/2015	09/2065	3.250%	64,291	64,291		
566	Columbia River Fish Mitigation	09/2016	09/2066	3.000%	30,066	30,066		
567	Columbia River Fish Mitigation	09/2017	09/2067	2.375%	57,719	57,719		
568	Columbia River Fish Mitigation	09/2018	09/2068	2.750%	48,446	48,446		
569	Cougar	09/1964	09/2014	7.230%	10,414	0		
570	Cougar	09/1965	09/2014	7.230%	20	0		
571	Cougar	09/1966	09/2014	7.230%	20	0		
572	Cougar	09/1967	09/2014	7.230%	20	0		
573	Cougar	09/1968	09/2014	7.230%	20	0		
574	Cougar	09/1969	09/2014	7.230%	20	0		

**TABLE 12A:**  
**HISTORICAL INVESTMENTS**  
**October 1, 2018 - September 30, 2021 Cost Evaluation period**  
**(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
575	Cougar	09/1970	09/2014	7.230%	20	0		
576	Cougar	09/1971	09/2014	7.230%	20	0		
577	Cougar	09/1972	09/2014	7.230%	20	0		
578	Cougar	09/1973	09/2014	7.230%	20	0		
579	Cougar	09/1974	09/2014	7.230%	19	0		
580	Cougar	09/1975	09/2014	7.230%	20	0		
581	Cougar	09/1976	09/2014	7.230%	20	0		
582	Cougar	09/1977	09/2014	7.230%	20	0		
583	Cougar	09/1978	09/2014	7.230%	20	0		
584	Cougar	09/1979	09/2014	7.230%	20	0		
585	Cougar	09/1980	09/2014	7.230%	20	0		
586	Cougar	09/1981	09/2014	7.230%	20	0		
587	Cougar	09/1982	09/2014	7.230%	20	0		
588	Cougar	09/1983	09/2014	7.230%	20	0		
589	Cougar	09/1984	09/2014	10.750%	1	0		
590	Cougar	09/1985	09/2014	7.230%	1	0		
591	Cougar	09/1986	09/2014	7.230%	104	0		
592	Cougar	09/1986	09/2014	11.375%	55	0		
593	Cougar	09/1987	09/2014	7.230%	45	0		
594	Cougar	09/1988	09/2014	8.500%	2	0		
595	Cougar	09/1989	09/2014	9.250%	6	0		
596	Cougar	09/1990	09/2014	8.875%	10	0		
597	Cougar	09/1991	09/2014	8.750%	1,015	0		
598	Cougar	09/1991	09/2014	8.750%	1	0		
599	Cougar	09/1992	09/2014	8.500%	2	0		
600	Cougar	09/1993	09/2014	7.875%	539	0		
601	Cougar	09/1994	09/2019	7.125%	31	0		
602	Cougar	09/1995	09/2000	7.330%	3	0		
603	Cougar	09/1997	09/2047	7.150%	26	0		
604	Cougar	09/2004	09/2054	5.375%	3,622	0		
605	Cougar	09/2005	09/2055	5.125%	8,130	0		
606	Cougar	09/2006	09/2056	4.500%	109	109		
607	Cougar	09/2007	09/2057	5.000%	120	0		
608	Cougar	09/2009	09/2059	4.375%	121	121		
609	Cougar	09/2010	09/2060	4.250%	59	59		
610	Cougar	09/2011	09/2061	3.750%	282	282		
611	Cougar	09/2012	09/2062	3.375%	139	139		
612	Cougar	09/2013	09/2063	2.875%	4,088	4,088		
613	Cougar	09/2014	09/2064	3.875%	12	12		
614	Cougar	09/2016	09/2066	3.000%	2	2		
615	Cougar	09/2017	09/2067	2.375%	2	2		
616	Detroit Lake/Big Cliff	09/1953	09/2003	6.840%	12,533	0		
617	Detroit Lake/Big Cliff	09/1954	09/2004	6.880%	20,162	0		
618	Detroit Lake/Big Cliff	09/1955	09/2004	6.880%	18	0		
619	Detroit Lake/Big Cliff	09/1956	09/2004	6.880%	19	0		
620	Detroit Lake/Big Cliff	09/1957	09/2004	6.880%	18	0		
621	Detroit Lake/Big Cliff	09/1958	09/2004	6.880%	19	0		
622	Detroit Lake/Big Cliff	09/1959	09/2004	6.880%	18	0		
623	Detroit Lake/Big Cliff	09/1960	09/2004	6.880%	19	0		
624	Detroit Lake/Big Cliff	09/1961	09/2004	6.880%	18	0		
625	Detroit Lake/Big Cliff	09/1962	09/2004	6.880%	19	0		
626	Detroit Lake/Big Cliff	09/1963	09/2004	6.880%	18	0		
627	Detroit Lake/Big Cliff	09/1964	09/2004	6.880%	19	0		
628	Detroit Lake/Big Cliff	09/1965	09/2004	6.880%	18	0		
629	Detroit Lake/Big Cliff	09/1966	09/2004	6.880%	19	0		
630	Detroit Lake/Big Cliff	09/1967	09/2004	6.880%	18	0		
631	Detroit Lake/Big Cliff	09/1968	09/2004	6.880%	19	0		
632	Detroit Lake/Big Cliff	09/1969	09/2004	6.880%	18	0		
633	Detroit Lake/Big Cliff	09/1970	09/2004	6.880%	19	0		
634	Detroit Lake/Big Cliff	09/1971	09/2004	6.880%	18	0		
635	Detroit Lake/Big Cliff	09/1972	09/2004	6.880%	19	0		
636	Detroit Lake/Big Cliff	09/1973	09/2004	6.880%	18	0		
637	Detroit Lake/Big Cliff	09/1974	09/2004	6.880%	19	0		
638	Detroit Lake/Big Cliff	09/1975	09/2004	6.880%	18	0		
639	Detroit Lake/Big Cliff	09/1976	09/2004	6.880%	19	0		
640	Detroit Lake/Big Cliff	09/1977	09/2004	6.880%	18	0		
641	Detroit Lake/Big Cliff	09/1978	09/2004	6.880%	19	0		
642	Detroit Lake/Big Cliff	09/1979	09/2004	6.880%	18	0		
643	Detroit Lake/Big Cliff	09/1980	09/2004	6.880%	19	0		
644	Detroit Lake/Big Cliff	09/1981	09/2004	6.880%	18	0		
645	Detroit Lake/Big Cliff	09/1982	09/2004	6.880%	19	0		
646	Detroit Lake/Big Cliff	09/1983	09/2004	6.880%	18	0		
647	Detroit Lake/Big Cliff	09/1984	09/2004	10.750%	21	0		
648	Detroit Lake/Big Cliff	09/1985	09/2004	6.880%	6	0		
649	Detroit Lake/Big Cliff	09/1986	09/2004	11.375%	38	0		
650	Detroit Lake/Big Cliff	09/1987	09/2004	6.880%	3	0		
651	Detroit Lake/Big Cliff	09/1987	09/2004	8.875%	233	0		
652	Detroit Lake/Big Cliff	09/1988	09/2004	8.500%	68	0		
653	Detroit Lake/Big Cliff	09/1989	09/2004	9.250%	26	0		
654	Detroit Lake/Big Cliff	09/1990	09/2004	8.875%	115	0		
655	Detroit Lake/Big Cliff	09/1991	09/2004	8.750%	9	0		
656	Detroit Lake/Big Cliff	09/1991	09/2004	8.750%	20	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
657	Detroit Lake/Big Cliff	09/1992	09/2004	8.500%	8	0		
658	Detroit Lake/Big Cliff	09/1993	09/2004	7.875%	211	0		
659	Detroit Lake/Big Cliff	09/1994	09/1999	7.125%	7	0		
660	Detroit Lake/Big Cliff	09/1995	09/2000	7.330%	13	0		
661	Detroit Lake/Big Cliff	09/1995	09/2045	7.150%	38	0		
662	Detroit Lake/Big Cliff	09/1996	09/2006	6.950%	24	0		
663	Detroit Lake/Big Cliff	09/2001	09/2051	5.875%	282	0		
664	Detroit Lake/Big Cliff	09/2002	09/2052	5.500%	18	0		
665	Detroit Lake/Big Cliff	09/2003	09/2053	5.125%	223	0		
666	Detroit Lake/Big Cliff	09/2005	09/2055	5.125%	1,031	0		
667	Detroit Lake/Big Cliff	09/2013	09/2063	2.875%	528	528		
668	Detroit Lake/Big Cliff	09/2014	09/2064	3.875%	18	18		
669	Detroit Lake/Big Cliff	09/2016	09/2066	3.000%	31	31		
670	Dworshak	09/1973	09/2023	7.190%	138,443	0		
671	Dworshak	09/1973	09/2023	7.190%	836	0		
672	Dworshak	09/1974	09/2023	7.190%	515	0		
673	Dworshak	09/1974	09/2023	7.190%	3	0		
674	Dworshak	09/1975	09/2023	7.190%	518	0		
675	Dworshak	09/1975	09/2023	7.190%	3	0		
676	Dworshak	09/1976	09/2023	7.190%	518	0		
677	Dworshak	09/1976	09/2023	7.190%	3	0		
678	Dworshak	09/1977	09/2023	7.190%	518	0		
679	Dworshak	09/1977	09/2023	7.190%	3	0		
680	Dworshak	09/1978	09/2023	7.190%	518	0		
681	Dworshak	09/1978	09/2023	7.190%	3	0		
682	Dworshak	09/1979	09/2023	7.190%	518	0		
683	Dworshak	09/1979	09/2023	7.190%	3	0		
684	Dworshak	09/1980	09/2023	7.190%	518	0		
685	Dworshak	09/1980	09/2023	7.190%	3	0		
686	Dworshak	09/1981	09/2023	7.190%	518	0		
687	Dworshak	09/1981	09/2023	7.190%	3	0		
688	Dworshak	09/1982	09/2023	7.190%	518	0		
689	Dworshak	09/1982	09/2023	7.190%	3	0		
690	Dworshak	09/1983	09/2023	7.190%	523	0		
691	Dworshak	09/1983	09/2023	7.190%	3	0		
692	Dworshak	09/1984	09/2023	10.750%	2,499	0		
693	Dworshak	09/1984	09/2023	10.750%	15	0		
694	Dworshak	09/1985	09/2023	7.190%	1,141	0		
695	Dworshak	09/1986	09/2023	7.190%	197	0		
696	Dworshak	09/1987	09/2023	7.190%	36	0		
697	Dworshak	09/1987	09/2023	8.875%	65	0		
698	Dworshak	09/1988	09/2023	8.500%	61	0		
699	Dworshak	09/1989	09/2023	9.250%	63	0		
700	Dworshak	09/1990	09/2023	8.875%	245	0		
701	Dworshak	09/1990	09/2023	8.875%	24	0		
702	Dworshak	09/1991	09/2023	8.750%	224	0		
703	Dworshak	09/1992	09/2023	2.625%	4	0		
704	Dworshak	09/1992	09/2023	8.500%	28	0		
705	Dworshak	09/1992	09/2023	8.500%	24	0		
706	Dworshak	09/1993	09/2023	7.875%	41	0		
707	Dworshak	09/1993	09/2023	7.875%	1,872	0		
708	Dworshak	09/1994	09/2029	7.125%	1,351	0		
709	Dworshak	09/1994	09/2029	7.125%	964	0		
710	Dworshak	09/1995	09/2020	7.930%	55	0		
711	Dworshak	09/1995	09/2030	7.150%	218	0		
712	Dworshak	09/1995	09/2045	7.150%	1,162	0		
713	Dworshak	09/1996	09/2011	7.130%	107	0		
714	Dworshak	09/1996	09/2021	7.230%	26	0		
715	Dworshak	09/1996	09/2021	7.230%	184	0		
716	Dworshak	09/1996	09/2031	7.150%	6	0		
717	Dworshak	09/1996	09/2031	7.150%	203	0		
718	Dworshak	09/1996	09/2046	7.150%	3	0		
719	Dworshak	09/1996	09/2046	7.150%	4	0		
720	Dworshak	09/1996	09/2046	7.150%	46	0		
721	Dworshak	09/1997	09/2047	7.150%	7,588	0		
722	Dworshak	09/1999	09/2049	5.375%	630	0		
723	Dworshak	09/2002	09/2052	5.500%	199	0		
724	Dworshak	09/2003	09/2053	5.125%	761	0		
725	Dworshak	09/2005	09/2055	5.125%	713	0		
726	Dworshak	09/2006	09/2056	4.500%	73	73		
727	Dworshak	09/2008	09/2058	4.875%	10	10		
728	Dworshak	09/2009	09/2059	4.375%	2,307	2,307		
729	Dworshak	09/2014	09/2064	3.875%	50	0		
730	Green Peter/Foster	09/1967	09/2017	7.290%	24,445	0		
731	Green Peter/Foster	09/1968	09/2018	7.280%	12,180	0		
732	Green Peter/Foster	09/1969	09/2018	7.280%	39	0		
733	Green Peter/Foster	09/1970	09/2018	7.280%	40	0		
734	Green Peter/Foster	09/1971	09/2018	7.280%	39	0		
735	Green Peter/Foster	09/1972	09/2018	7.280%	39	0		
736	Green Peter/Foster	09/1973	09/2018	7.280%	39	0		
737	Green Peter/Foster	09/1974	09/2018	7.280%	39	0		
738	Green Peter/Foster	09/1975	09/2018	7.280%	39	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
739	Green Peter/Foster	09/1976	09/2018	7.280%	39	0		
740	Green Peter/Foster	09/1977	09/2018	7.280%	39	0		
741	Green Peter/Foster	09/1978	09/2018	7.280%	39	0		
742	Green Peter/Foster	09/1979	09/2018	7.280%	39	0		
743	Green Peter/Foster	09/1980	09/2018	7.280%	40	0		
744	Green Peter/Foster	09/1981	09/2018	7.280%	39	0		
745	Green Peter/Foster	09/1982	09/2018	7.280%	39	0		
746	Green Peter/Foster	09/1983	09/2018	7.280%	39	0		
747	Green Peter/Foster	09/1984	09/2018	10.750%	15	0		
748	Green Peter/Foster	09/1985	09/2018	7.280%	16	0		
749	Green Peter/Foster	09/1986	09/2018	7.280%	3	0		
750	Green Peter/Foster	09/1986	09/2018	11.375%	3	0		
751	Green Peter/Foster	09/1987	09/2018	7.280%	1	0		
752	Green Peter/Foster	09/1987	09/2018	8.875%	2	0		
753	Green Peter/Foster	09/1988	09/2018	8.500%	13	0		
754	Green Peter/Foster	09/1989	09/2018	9.250%	24	0		
755	Green Peter/Foster	09/1990	09/2018	8.875%	5	0		
756	Green Peter/Foster	09/1991	09/2018	8.750%	48	0		
757	Green Peter/Foster	09/1992	09/2018	8.500%	2	0		
758	Green Peter/Foster	09/1993	09/2018	7.875%	41	0		
759	Green Peter/Foster	09/1994	09/1999	7.125%	6	0		
760	Green Peter/Foster	09/1995	09/2000	7.330%	4	0		
761	Green Peter/Foster	09/1995	09/2020	7.250%	11	0		
762	Green Peter/Foster	09/1995	09/2020	7.250%	24	0		
763	Green Peter/Foster	09/1996	09/2046	7.150%	26	0		
764	Green Peter/Foster	09/2001	09/2051	5.875%	200	0		
765	Green Peter/Foster	09/2011	09/2061	3.750%	87	87		
766	Green Peter/Foster	09/2012	09/2062	3.375%	28	28		
767	Green Peter/Foster	09/2014	09/2064	3.875%	385	385		
768	Green Peter/Foster	09/2015	09/2065	3.250%	68	68		
769	Green Peter/Foster	09/2016	09/2066	3.000%	70	70		
770	Hills Creek	09/1962	09/2012	7.160%	10,353	0		
771	Hills Creek	09/1963	09/2012	7.160%	12	0		
772	Hills Creek	09/1964	09/2012	7.160%	13	0		
773	Hills Creek	09/1965	09/2012	7.160%	13	0		
774	Hills Creek	09/1966	09/2012	7.160%	13	0		
775	Hills Creek	09/1967	09/2012	7.160%	13	0		
776	Hills Creek	09/1968	09/2012	7.160%	13	0		
777	Hills Creek	09/1969	09/2012	7.160%	13	0		
778	Hills Creek	09/1970	09/2012	7.160%	13	0		
779	Hills Creek	09/1971	09/2012	7.160%	13	0		
780	Hills Creek	09/1972	09/2012	7.160%	13	0		
781	Hills Creek	09/1973	09/2012	7.160%	13	0		
782	Hills Creek	09/1974	09/2012	7.160%	13	0		
783	Hills Creek	09/1975	09/2012	7.160%	13	0		
784	Hills Creek	09/1976	09/2012	7.160%	13	0		
785	Hills Creek	09/1977	09/2012	7.160%	13	0		
786	Hills Creek	09/1978	09/2012	7.160%	13	0		
787	Hills Creek	09/1979	09/2012	7.160%	13	0		
788	Hills Creek	09/1980	09/2012	7.160%	13	0		
789	Hills Creek	09/1981	09/2012	7.160%	13	0		
790	Hills Creek	09/1982	09/2012	7.160%	13	0		
791	Hills Creek	09/1983	09/2012	7.160%	13	0		
792	Hills Creek	09/1984	09/2012	10.750%	52	0		
793	Hills Creek	09/1985	09/2012	7.160%	6	0		
794	Hills Creek	09/1987	09/2012	8.875%	3	0		
795	Hills Creek	09/1988	09/2012	8.500%	3	0		
796	Hills Creek	09/1990	09/2012	8.875%	3	0		
797	Hills Creek	09/1991	09/2012	8.750%	17	0		
798	Hills Creek	09/1992	09/2012	8.500%	1	0		
799	Hills Creek	09/1993	09/2012	7.875%	13	0		
800	Hills Creek	09/1996	09/2046	7.150%	28	0		
801	Hills Creek	09/2000	09/2050	6.125%	2,630	0		
802	Hills Creek	09/2001	09/2051	5.875%	8	0		
803	Hills Creek	09/2002	09/2052	5.500%	2	0		
804	Hills Creek	09/2005	09/2055	5.125%	46	0		
805	Hills Creek	09/2011	09/2061	3.750%	12	12		
806	Hills Creek	09/2012	09/2062	3.375%	142	142		
807	Hungry Horse Dam	09/1953	09/2003	6.840%	75,076	0		
808	Hungry Horse Dam	09/1953	09/2003	6.840%	2,126	0		
809	Hungry Horse Dam	09/1954	09/2003	6.840%	17	0		
810	Hungry Horse Dam	09/1954	09/2003	6.840%	1	0		
811	Hungry Horse Dam	09/1955	09/2003	6.840%	17	0		
812	Hungry Horse Dam	09/1955	09/2003	6.840%	1	0		
813	Hungry Horse Dam	09/1956	09/2003	6.840%	17	0		
814	Hungry Horse Dam	09/1956	09/2003	6.840%	1	0		
815	Hungry Horse Dam	09/1957	09/2003	6.840%	18	0		
816	Hungry Horse Dam	09/1957	09/2003	6.840%	1	0		
817	Hungry Horse Dam	09/1958	09/2003	6.840%	18	0		
818	Hungry Horse Dam	09/1958	09/2003	6.840%	1	0		
819	Hungry Horse Dam	09/1959	09/2003	6.840%	18	0		
820	Hungry Horse Dam	09/1959	09/2003	6.840%	1	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
821	Hungry Horse Dam	09/1960	09/2003	6.840%	18	0		
822	Hungry Horse Dam	09/1960	09/2003	6.840%	1	0		
823	Hungry Horse Dam	09/1961	09/2003	6.840%	18	0		
824	Hungry Horse Dam	09/1961	09/2003	6.840%	1	0		
825	Hungry Horse Dam	09/1962	09/2003	6.840%	18	0		
826	Hungry Horse Dam	09/1962	09/2003	6.840%	1	0		
827	Hungry Horse Dam	09/1963	09/2003	6.840%	18	0		
828	Hungry Horse Dam	09/1963	09/2003	6.840%	1	0		
829	Hungry Horse Dam	09/1964	09/2003	6.840%	17	0		
830	Hungry Horse Dam	09/1964	09/2003	6.840%	1	0		
831	Hungry Horse Dam	09/1965	09/2003	6.840%	17	0		
832	Hungry Horse Dam	09/1965	09/2003	6.840%	1	0		
833	Hungry Horse Dam	09/1966	09/2003	6.840%	17	0		
834	Hungry Horse Dam	09/1966	09/2003	6.840%	1	0		
835	Hungry Horse Dam	09/1967	09/2003	6.840%	18	0		
836	Hungry Horse Dam	09/1967	09/2003	6.840%	1	0		
837	Hungry Horse Dam	09/1968	09/2003	6.840%	18	0		
838	Hungry Horse Dam	09/1968	09/2003	6.840%	1	0		
839	Hungry Horse Dam	09/1969	09/2003	6.840%	18	0		
840	Hungry Horse Dam	09/1969	09/2003	6.840%	1	0		
841	Hungry Horse Dam	09/1970	09/2003	6.840%	18	0		
842	Hungry Horse Dam	09/1970	09/2003	6.840%	1	0		
843	Hungry Horse Dam	09/1971	09/2003	6.840%	18	0		
844	Hungry Horse Dam	09/1971	09/2003	6.840%	1	0		
845	Hungry Horse Dam	09/1972	09/2003	6.840%	18	0		
846	Hungry Horse Dam	09/1972	09/2003	6.840%	1	0		
847	Hungry Horse Dam	09/1973	09/2003	6.840%	18	0		
848	Hungry Horse Dam	09/1973	09/2003	6.840%	1	0		
849	Hungry Horse Dam	09/1974	09/2003	6.840%	17	0		
850	Hungry Horse Dam	09/1974	09/2003	6.840%	1	0		
851	Hungry Horse Dam	09/1975	09/2003	6.840%	17	0		
852	Hungry Horse Dam	09/1975	09/2003	6.840%	1	0		
853	Hungry Horse Dam	09/1976	09/2003	6.840%	10	0		
854	Hungry Horse Dam	09/1976	09/2003	6.840%	1	0		
855	Hungry Horse Dam	09/1977	09/2003	6.840%	18	0		
856	Hungry Horse Dam	09/1977	09/2003	6.840%	1	0		
857	Hungry Horse Dam	09/1978	09/2003	6.840%	18	0		
858	Hungry Horse Dam	09/1978	09/2003	6.840%	1	0		
859	Hungry Horse Dam	09/1979	09/2003	6.840%	18	0		
860	Hungry Horse Dam	09/1979	09/2003	6.840%	1	0		
861	Hungry Horse Dam	09/1980	09/2003	6.840%	18	0		
862	Hungry Horse Dam	09/1980	09/2003	6.840%	1	0		
863	Hungry Horse Dam	09/1981	09/2003	6.840%	22	0		
864	Hungry Horse Dam	09/1981	09/2003	6.840%	1	0		
865	Hungry Horse Dam	09/1982	09/2003	6.840%	1	0		
866	Hungry Horse Dam	09/1983	09/2003	6.840%	12	0		
867	Hungry Horse Dam	09/1983	09/2003	6.840%	1	0		
868	Hungry Horse Dam	09/1984	09/2003	10.750%	32	0		
869	Hungry Horse Dam	09/1984	09/2003	10.750%	1	0		
870	Hungry Horse Dam	09/1985	09/2003	12.375%	36	0		
871	Hungry Horse Dam	09/1985	09/2003	12.375%	37	0		
872	Hungry Horse Dam	09/1989	09/2003	9.250%	101	0		
873	Hungry Horse Dam	09/1990	09/2003	8.875%	58	0		
874	Hungry Horse Dam	09/1991	09/2003	8.750%	19	0		
875	Hungry Horse Dam	09/1992	09/2003	8.500%	9	0		
876	Hungry Horse Dam	09/1993	09/2003	7.875%	4,136	0		
877	Hungry Horse Dam	09/1993	09/2003	7.875%	2	0		
878	Hungry Horse Dam	09/1994	09/2019	7.125%	56	0		
879	Hungry Horse Dam	09/1995	09/2000	6.620%	156	0		
880	Hungry Horse Dam	09/1995	09/2000	6.620%	84	0		
881	Hungry Horse Dam	09/1995	09/2020	7.930%	450	0		
882	Hungry Horse Dam	09/1995	09/2030	7.150%	536	0		
883	Hungry Horse Dam	09/1995	09/2030	7.150%	1,198	0		
884	Hungry Horse Dam	09/1995	09/2045	7.150%	6,190	0		
885	Hungry Horse Dam	09/1995	09/2045	7.860%	14,354	0		
886	Hungry Horse Dam	09/1996	09/2046	7.150%	15	0		
887	Hungry Horse Dam	09/1996	09/2046	7.150%	2	0		
888	Hungry Horse Dam	09/1997	09/2007	6.950%	154	0		
889	Hungry Horse Dam	09/1997	09/2047	7.150%	111	0		
890	Hungry Horse Dam	09/2001	09/2051	5.875%	552	0		
891	Hungry Horse Dam	09/2005	09/2055	5.125%	2,951	0		
892	Hungry Horse Dam	09/2007	09/2057	5.000%	294	0		
893	Hungry Horse Dam	09/2008	09/2058	4.875%	76	76		
894	Hungry Horse Dam	09/2009	09/2059	4.375%	60	60		
895	Hungry Horse Dam	09/2010	09/2060	4.250%	779	779		
896	Hungry Horse Dam	09/2011	09/2061	3.750%	503	503		
897	Hungry Horse Dam	09/2012	09/2062	3.375%	3	3		
898	Hungry Horse Dam	09/2014	09/2064	3.875%	12	12		
899	Hungry Horse Dam	09/2015	09/2065	3.250%				
900	Ice Harbor	09/1962	09/2012	7.160%	59,699	0		
901	Ice Harbor	09/1962	09/2012	7.160%	664	0		
902	Ice Harbor	09/1963	09/2012	7.160%	46	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
903	Ice Harbor	09/1963	09/2012	7.160%	1	0		
904	Ice Harbor	09/1964	09/2012	7.160%	46	0		
905	Ice Harbor	09/1964	09/2012	7.160%	1	0		
906	Ice Harbor	09/1965	09/2012	7.160%	46	0		
907	Ice Harbor	09/1965	09/2012	7.160%	1	0		
908	Ice Harbor	09/1966	09/2012	7.160%	46	0		
909	Ice Harbor	09/1966	09/2012	7.160%	1	0		
910	Ice Harbor	09/1967	09/2012	7.160%	46	0		
911	Ice Harbor	09/1967	09/2012	7.160%	1	0		
912	Ice Harbor	09/1968	09/2012	7.160%	46	0		
913	Ice Harbor	09/1968	09/2012	7.160%	1	0		
914	Ice Harbor	09/1969	09/2012	7.160%	46	0		
915	Ice Harbor	09/1969	09/2012	7.160%	1	0		
916	Ice Harbor	09/1970	09/2012	7.160%	46	0		
917	Ice Harbor	09/1970	09/2012	7.160%	1	0		
918	Ice Harbor	09/1971	09/2012	7.160%	46	0		
919	Ice Harbor	09/1971	09/2012	7.160%	1	0		
920	Ice Harbor	09/1972	09/2012	7.160%	46	0		
921	Ice Harbor	09/1972	09/2012	7.160%	1	0		
922	Ice Harbor	09/1973	09/2012	7.160%	46	0		
923	Ice Harbor	09/1973	09/2012	7.160%	1	0		
924	Ice Harbor	09/1974	09/2012	7.160%	46	0		
925	Ice Harbor	09/1974	09/2012	7.160%	1	0		
926	Ice Harbor	09/1975	09/2012	7.160%	46	0		
927	Ice Harbor	09/1975	09/2012	7.160%	1	0		
928	Ice Harbor	09/1976	09/2012	7.160%	46	0		
929	Ice Harbor	09/1976	09/2012	7.160%	1	0		
930	Ice Harbor	09/1976	09/2026	7.150%	20,472	0		
931	Ice Harbor	09/1976	09/2026	7.150%	228	0		
932	Ice Harbor	09/1977	09/2012	7.160%	46	0		
933	Ice Harbor	09/1977	09/2012	7.160%	1	0		
934	Ice Harbor	09/1978	09/2012	7.160%	46	0		
935	Ice Harbor	09/1978	09/2012	7.160%	1	0		
936	Ice Harbor	09/1979	09/2012	7.160%	46	0		
937	Ice Harbor	09/1979	09/2012	7.160%	1	0		
938	Ice Harbor	09/1980	09/2012	7.160%	46	0		
939	Ice Harbor	09/1980	09/2012	7.160%	1	0		
940	Ice Harbor	09/1981	09/2012	7.160%	46	0		
941	Ice Harbor	09/1981	09/2012	7.160%	1	0		
942	Ice Harbor	09/1982	09/2012	7.160%	46	0		
943	Ice Harbor	09/1982	09/2012	7.160%	1	0		
944	Ice Harbor	09/1983	09/2012	7.160%	46	0		
945	Ice Harbor	09/1983	09/2012	7.160%	1	0		
946	Ice Harbor	09/1985	09/2012	7.160%	41	0		
947	Ice Harbor	09/1985	09/2026	7.150%	21	0		
948	Ice Harbor	09/1986	09/2012	7.160%	137	0		
949	Ice Harbor	09/1987	09/2012	7.160%	3	0		
950	Ice Harbor	09/1987	09/2012	8.875%	71	0		
951	Ice Harbor	09/1987	09/2012	8.875%	1	0		
952	Ice Harbor	09/1988	09/2012	8.500%	8	0		
953	Ice Harbor	09/1988	09/2012	8.500%	57	0		
954	Ice Harbor	09/1989	09/2012	9.250%	51	0		
955	Ice Harbor	09/1990	09/2012	8.875%	427	0		
956	Ice Harbor	09/1991	09/2012	8.750%	348	0		
957	Ice Harbor	09/1992	09/2012	8.500%	177	0		
958	Ice Harbor	09/1993	09/2012	7.875%	3,192	0		
959	Ice Harbor	09/1993	09/2012	7.875%	1,645	0		
960	Ice Harbor	09/1994	09/2029	7.125%	328	0		
961	Ice Harbor	09/1994	09/2029	7.125%	520	0		
962	Ice Harbor	09/1995	09/2000	7.330%	2	0		
963	Ice Harbor	09/1995	09/2019	7.270%	84	0		
964	Ice Harbor	09/1995	09/2019	7.270%	171	0		
965	Ice Harbor	09/1995	09/2019	7.270%	849	0		
966	Ice Harbor	09/1996	09/2031	7.150%	78	0		
967	Ice Harbor	09/1996	09/2041	7.150%	371	0		
968	Ice Harbor	09/1997	09/2022	7.230%	66	0		
969	Ice Harbor	09/1997	09/2047	7.150%	67	0		
970	Ice Harbor	09/1999	09/2049	5.375%	5,516	0		
971	Ice Harbor	09/2000	09/2050	6.125%	548	0		
972	Ice Harbor	09/2001	09/2051	5.875%	764	0		
973	Ice Harbor	09/2002	09/2052	5.500%	1,014	0		
974	Ice Harbor	09/2003	09/2053	5.125%	50	0		
975	Ice Harbor	09/2004	09/2054	5.375%	3,321	0		
976	Ice Harbor	09/2008	09/2058	4.875%	14	14		
977	Ice Harbor	09/2009	09/2059	4.375%	2,615	2,615		
978	Ice Harbor	09/2010	09/2060	4.250%	207	207		
979	Ice Harbor	09/2011	09/2061	3.750%	819	819		
980	Ice Harbor	09/2012	09/2062	3.375%	115	115		
981	Ice Harbor	09/2015	09/2065	3.250%	3,175	3,175		
982	Ice Harbor	09/2016	09/2066	3.000%	558	558		
983	John Day	09/1968	09/2018	7.280%	27,254	0		
984	John Day	09/1969	09/2019	7.270%	96,104	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
985	John Day	09/1970	09/2020	7.250%	23,656	0		
986	John Day	09/1971	09/2021	7.230%	34,974	0		
987	John Day	09/1972	09/2022	7.210%	11,502	0		
988	John Day	09/1984	09/2022	10.750%	3,677	0		
989	John Day	09/1985	09/2022	7.210%	6,490	0		
990	John Day	09/1985	09/2022	12.375%	1,209	0		
991	John Day	09/1986	09/2022	7.210%	3,227	0		
992	John Day	09/1986	09/2022	11.375%	713	0		
993	John Day	09/1987	09/2022	7.210%	706	0		
994	John Day	09/1987	09/2022	8.875%	4,353	0		
995	John Day	09/1988	09/2022	8.500%	332	0		
996	John Day	09/1988	09/2022	8.500%	199	0		
997	John Day	09/1989	09/2022	7.210%	30	0		
998	John Day	09/1989	09/2022	9.250%	377	0		
999	John Day	09/1990	09/2022	7.210%	37	0		
1000	John Day	09/1990	09/2022	8.875%	543	0		
1001	John Day	09/1991	09/2022	8.750%	13,218	0		
1002	John Day	09/1991	09/2022	8.750%	144	0		
1003	John Day	09/1992	09/2022	7.210%	19	0		
1004	John Day	09/1992	09/2022	8.500%	95	0		
1005	John Day	09/1993	09/2022	7.875%	7,810	0		
1006	John Day	09/1993	09/2022	7.875%	9,585	0		
1007	John Day	09/1994	09/2019	7.125%	14	0		
1008	John Day	09/1994	09/2029	7.125%	1,252	0		
1009	John Day	09/1995	09/2000	7.330%	2	0		
1010	John Day	09/1995	09/2000	7.330%	9	0		
1011	John Day	09/1995	09/2020	7.250%	79	0		
1012	John Day	09/1995	09/2035	7.150%	22	0		
1013	John Day	09/1995	09/2035	7.150%	52	0		
1014	John Day	09/1995	09/2035	7.150%	121	0		
1015	John Day	09/1995	09/2045	7.150%	37	0		
1016	John Day	09/1995	09/2045	7.150%	608	0		
1017	John Day	09/1995	09/2045	7.150%	7,653	0		
1018	John Day	09/1996	09/2011	7.130%	237	0		
1019	John Day	09/1996	09/2016	7.290%	1,072	0		
1020	John Day	09/1997	09/2022	7.230%	133	0		
1021	John Day	09/1997	09/2047	7.150%	179	0		
1022	John Day	09/1999	09/2049	5.375%	3,510	0		
1023	John Day	09/2000	09/2050	6.125%	2,761	0		
1024	John Day	09/2001	09/2051	5.875%	619	0		
1025	John Day	09/2004	09/2054	5.375%	2,830	0		
1026	John Day	09/2005	09/2055	5.125%	2,827	0		
1027	John Day	09/2006	09/2056	4.500%	601	601		
1028	John Day	09/2007	09/2057	5.000%	233	0		
1029	John Day	09/2009	09/2059	4.375%	1,548	1,548		
1030	John Day	09/2010	09/2060	4.250%	356	356		
1031	John Day	09/2011	09/2061	3.750%	175	175		
1032	John Day	09/2012	09/2062	3.375%	6,161	6,161		
1033	John Day	09/2013	09/2063	2.875%	17	17		
1034	John Day	09/2015	09/2065	3.250%	163	163		
1035	Libby	09/1975	09/2025	7.160%	54,644	0		
1036	Libby	09/1976	09/2026	7.150%	153,432	0		
1037	Libby	09/1977	09/2026	7.150%	1,465	0		
1038	Libby	09/1978	09/2026	7.150%	1,465	0		
1039	Libby	09/1979	09/2026	7.150%	1,465	0		
1040	Libby	09/1980	09/2026	7.150%	1,465	0		
1041	Libby	09/1981	09/2026	7.150%	1,465	0		
1042	Libby	09/1982	09/2026	7.150%	1,465	0		
1043	Libby	09/1983	09/2026	7.150%	1,465	0		
1044	Libby	09/1984	09/2026	10.750%	104	0		
1045	Libby	09/1985	09/2026	7.150%	518	0		
1046	Libby	09/1986	09/2026	7.150%	283	0		
1047	Libby	09/1987	09/2026	7.150%	2	0		
1048	Libby	09/1988	09/2026	8.505%	35	0		
1049	Libby	09/1988	09/2038	7.150%	18,043	0		
1050	Libby	09/1989	09/2026	7.150%	1	0		
1051	Libby	09/1989	09/2026	9.250%	131	0		
1052	Libby	09/1990	09/2026	8.875%	11	0		
1053	Libby	09/1991	09/2026	8.750%	134	0		
1054	Libby	09/1992	09/2026	8.500%	100	0		
1055	Libby	09/1992	09/2026	8.500%	70	0		
1056	Libby	09/1993	09/2026	7.875%	600	0		
1057	Libby	09/1994	09/2029	7.125%	215	0		
1058	Libby	09/1994	09/2029	7.150%	286	0		
1059	Libby	09/1995	09/2030	7.150%	15	0		
1060	Libby	09/1995	09/2030	7.150%	41	0		
1061	Libby	09/1995	09/2030	7.150%	94	0		
1062	Libby	09/1997	09/2022	7.230%	432	0		
1063	Libby	09/1997	09/2047	7.150%	660	0		
1064	Libby	09/2001	09/2051	5.875%	5,562	0		
1065	Libby	09/2008	09/2058	4.875%	1,567	1,567		
1066	Libby	09/2010	09/2060	4.250%	40	40		



**TABLE 12A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1067	Libby	09/2011	09/2061	3.750%	152	152		
1068	Libby	09/2012	09/2062	3.375%	16	16		
1069	Libby	09/2018	09/2068	2.750%	282	282		
1070	Little Goose	09/1970	09/2020	7.250%	22,326	0		
1071	Little Goose	09/1971	09/2021	7.230%	42,962	0		
1072	Little Goose	09/1972	09/2021	7.230%	28	0		
1073	Little Goose	09/1973	09/2021	7.230%	29	0		
1074	Little Goose	09/1974	09/2021	7.230%	28	0		
1075	Little Goose	09/1975	09/2021	7.230%	29	0		
1076	Little Goose	09/1976	09/2021	7.230%	28	0		
1077	Little Goose	09/1977	09/2021	7.230%	29	0		
1078	Little Goose	09/1978	09/2021	7.230%	28	0		
1079	Little Goose	09/1978	09/2028	7.150%	49,578	0		
1080	Little Goose	09/1979	09/2021	7.230%	29	0		
1081	Little Goose	09/1980	09/2021	7.230%	28	0		
1082	Little Goose	09/1981	09/2021	7.230%	29	0		
1083	Little Goose	09/1982	09/2021	7.230%	28	0		
1084	Little Goose	09/1983	09/2021	7.230%	29	0		
1085	Little Goose	09/1984	09/2021	10.750%	201	0		
1086	Little Goose	09/1985	09/2021	7.230%	174	0		
1087	Little Goose	09/1985	09/2028	7.150%	47	0		
1088	Little Goose	09/1986	09/2021	7.230%	239	0		
1089	Little Goose	09/1987	09/2021	7.230%	6	0		
1090	Little Goose	09/1987	09/2021	8.875%	72	0		
1091	Little Goose	09/1988	09/2021	8.500%	12	0		
1092	Little Goose	09/1988	09/2021	8.500%	68	0		
1093	Little Goose	09/1989	09/2021	9.250%	77	0		
1094	Little Goose	09/1990	09/2021	8.875%	408	0		
1095	Little Goose	09/1990	09/2021	8.875%	21	0		
1096	Little Goose	09/1991	09/2021	8.750%	266	0		
1097	Little Goose	09/1992	09/2021	8.500%	66	0		
1098	Little Goose	09/1992	09/2021	8.500%	27	0		
1099	Little Goose	09/1993	09/2021	7.875%	276	0		
1100	Little Goose	09/1993	09/2021	7.875%	3,359	0		
1101	Little Goose	09/1994	09/2019	7.125%	37	0		
1102	Little Goose	09/1994	09/2029	7.125%	2,044	0		
1103	Little Goose	09/1995	09/2040	7.150%	17	0		
1104	Little Goose	09/1995	09/2040	7.150%	450	0		
1105	Little Goose	09/1995	09/2040	7.150%	733	0		
1106	Little Goose	09/1996	09/2046	7.150%	10	0		
1107	Little Goose	09/1996	09/2046	7.150%	10	0		
1108	Little Goose	09/1996	09/2046	7.150%	211	0		
1109	Little Goose	09/1996	09/2046	7.150%	241	0		
1110	Little Goose	09/1996	09/2046	7.150%	520	0		
1111	Little Goose	09/1996	09/2046	7.150%	3,909	0		
1112	Little Goose	09/1997	09/2047	7.150%	1	0		
1113	Little Goose	09/2001	09/2051	5.875%	4,608	0		
1114	Little Goose	09/2002	09/2052	5.500%	27	0		
1115	Little Goose	09/2003	09/2053	5.125%	146	0		
1116	Little Goose	09/2004	09/2054	5.375%	67	0		
1117	Little Goose	09/2008	09/2058	4.875%	13	13		
1118	Little Goose	09/2009	09/2059	4.375%	3,171	3,171		
1119	Little Goose	09/2010	09/2060	4.250%	30	30		
1120	Little Goose	09/2013	09/2063	2.875%	66	66		
1121	Little Goose	09/2018	09/2068	2.750%	2,707	2,707		
1122	Lookout Dam	09/1955	09/2005	6.910%	34,290	0		
1123	Lookout Dam	09/1956	09/2005	6.910%	52	0		
1124	Lookout Dam	09/1957	09/2005	6.910%	51	0		
1125	Lookout Dam	09/1958	09/2005	6.910%	51	0		
1126	Lookout Dam	09/1959	09/2005	6.910%	51	0		
1127	Lookout Dam	09/1960	09/2005	6.910%	51	0		
1128	Lookout Dam	09/1961	09/2005	6.910%	52	0		
1129	Lookout Dam	09/1962	09/2005	6.910%	51	0		
1130	Lookout Dam	09/1963	09/2005	6.910%	51	0		
1131	Lookout Dam	09/1964	09/2005	6.910%	51	0		
1132	Lookout Dam	09/1965	09/2005	6.910%	51	0		
1133	Lookout Dam	09/1966	09/2005	6.910%	51	0		
1134	Lookout Dam	09/1967	09/2005	6.910%	52	0		
1135	Lookout Dam	09/1968	09/2005	6.910%	51	0		
1136	Lookout Dam	09/1969	09/2005	6.910%	51	0		
1137	Lookout Dam	09/1970	09/2005	6.910%	51	0		
1138	Lookout Dam	09/1971	09/2005	6.910%	51	0		
1139	Lookout Dam	09/1972	09/2005	6.910%	51	0		
1140	Lookout Dam	09/1973	09/2005	6.910%	52	0		
1141	Lookout Dam	09/1974	09/2005	6.910%	51	0		
1142	Lookout Dam	09/1975	09/2005	6.910%	51	0		
1143	Lookout Dam	09/1976	09/2005	6.910%	51	0		
1144	Lookout Dam	09/1977	09/2005	6.910%	51	0		
1145	Lookout Dam	09/1978	09/2005	6.910%	51	0		
1146	Lookout Dam	09/1979	09/2005	6.910%	52	0		
1147	Lookout Dam	09/1980	09/2005	6.910%	51	0		
1148	Lookout Dam	09/1981	09/2005	6.910%	51	0		

**TABLE 12A:  
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(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1149	Lookout Dam	09/1982	09/2005	6.910%	51	0		
1150	Lookout Dam	09/1983	09/2005	6.910%	51	0		
1151	Lookout Dam	09/1984	09/2005	10.750%	185	0		
1152	Lookout Dam	09/1985	09/2005	6.910%	52	0		
1153	Lookout Dam	09/1986	09/2005	6.910%	42	0		
1154	Lookout Dam	09/1987	09/2005	6.910%	9	0		
1155	Lookout Dam	09/1987	09/2005	8.875%	12	0		
1156	Lookout Dam	09/1988	09/2005	8.500%	46	0		
1157	Lookout Dam	09/1988	09/2005	8.500%	17	0		
1158	Lookout Dam	09/1989	09/2005	9.250%	23	0		
1159	Lookout Dam	09/1990	09/2005	8.875%	147	0		
1160	Lookout Dam	09/1990	09/2005	8.875%	4	0		
1161	Lookout Dam	09/1991	09/2005	8.750%	6	0		
1162	Lookout Dam	09/1991	09/2005	8.750%	50	0		
1163	Lookout Dam	09/1992	09/2005	8.500%	181	0		
1164	Lookout Dam	09/1992	09/2005	8.500%	4	0		
1165	Lookout Dam	09/1993	09/2005	7.875%	18	0		
1166	Lookout Dam	09/1993	09/2005	7.875%	189	0		
1167	Lookout Dam	09/1994	09/2019	7.125%	73	0		
1168	Lookout Dam	09/1995	09/2045	7.150%	80	0		
1169	Lookout Dam	09/1995	09/2045	7.150%	33	0		
1170	Lookout Dam	09/1995	09/2045	7.860%	9	0		
1171	Lookout Dam	09/1995	09/2045	7.860%	15	0		
1172	Lookout Dam	09/1995	09/2045	7.860%	31	0		
1173	Lookout Dam	09/1995	09/2045	7.860%	157	0		
1174	Lookout Dam	09/2000	09/2050	6.125%	5,098	0		
1175	Lookout Dam	09/2003	09/2053	5.125%	135	0		
1176	Lookout Dam	09/2005	09/2055	5.125%	7,355	0		
1177	Lookout Dam	09/2007	09/2057	5.000%	572	0		
1178	Lookout Dam	09/2011	09/2061	3.750%	17	17		
1179	Lookout Dam	09/2012	09/2062	3.375%	294	294		
1180	Lost Creek	09/1977	09/2027	7.150%	14,293	0		
1181	Lost Creek	09/1978	09/2027	7.150%	58	0		
1182	Lost Creek	09/1979	09/2027	7.150%	60	0		
1183	Lost Creek	09/1980	09/2027	7.150%	60	0		
1184	Lost Creek	09/1981	09/2027	7.150%	60	0		
1185	Lost Creek	09/1982	09/2027	7.150%	60	0		
1186	Lost Creek	09/1983	09/2027	7.150%	60	0		
1187	Lost Creek	09/1984	09/2027	10.750%	243	0		
1188	Lost Creek	09/1985	09/2027	7.150%	12	0		
1189	Lost Creek	09/1986	09/2027	7.150%	6	0		
1190	Lost Creek	09/1986	09/2027	11.375%	5	0		
1191	Lost Creek	09/1987	09/2027	7.150%	4	0		
1192	Lost Creek	09/1987	09/2027	8.875%	3	0		
1193	Lost Creek	09/1988	09/2027	8.500%	7	0		
1194	Lost Creek	09/1989	09/2027	9.250%	9	0		
1195	Lost Creek	09/1990	09/2027	8.875%	1	0		
1196	Lost Creek	09/1991	09/2027	8.750%	31	0		
1197	Lost Creek	09/1992	09/2027	8.500%	1	0		
1198	Lost Creek	09/1992	09/2027	8.500%	1	0		
1199	Lost Creek	09/1993	09/2027	7.875%	1	0		
1200	Lost Creek	09/1993	09/2027	7.875%	14	0		
1201	Lost Creek	09/1995	09/2000	7.330%	4	0		
1202	Lost Creek	09/1995	09/2045	7.150%	94	0		
1203	Lost Creek	09/1996	09/2031	7.150%	31	0		
1204	Lost Creek	09/1996	09/2046	7.150%	24	0		
1205	Lost Creek	09/2001	09/2051	5.875%	147	0		
1206	Lost Creek	09/2011	09/2061	3.750%	7	7		
1207	Lower Granite	09/1975	09/2025	7.160%	119,237	0		
1208	Lower Granite	09/1976	09/2025	7.160%	510	0		
1209	Lower Granite	09/1977	09/2025	7.160%	510	0		
1210	Lower Granite	09/1978	09/2025	7.160%	510	0		
1211	Lower Granite	09/1978	09/2028	7.150%	40,611	0		
1212	Lower Granite	09/1979	09/2025	7.160%	510	0		
1213	Lower Granite	09/1980	09/2025	7.160%	510	0		
1214	Lower Granite	09/1981	09/2025	7.160%	510	0		
1215	Lower Granite	09/1982	09/2025	7.160%	510	0		
1216	Lower Granite	09/1983	09/2025	7.160%	510	0		
1217	Lower Granite	09/1984	09/2025	10.750%	311	0		
1218	Lower Granite	09/1985	09/2025	7.160%	328	0		
1219	Lower Granite	09/1986	09/2025	7.160%	215	0		
1220	Lower Granite	09/1986	09/2025	11.375%	4	0		
1221	Lower Granite	09/1987	09/2025	7.160%	8	0		
1222	Lower Granite	09/1987	09/2025	8.875%	60	0		
1223	Lower Granite	09/1988	09/2025	8.500%	22	0		
1224	Lower Granite	09/1988	09/2025	8.500%	95	0		
1225	Lower Granite	09/1989	09/2025	9.250%	112	0		
1226	Lower Granite	09/1990	09/2025	8.875%	392	0		
1227	Lower Granite	09/1991	09/2025	8.750%	281	0		
1228	Lower Granite	09/1991	09/2025	8.750%	6	0		
1229	Lower Granite	09/1992	09/2025	8.500%	83	0		
1230	Lower Granite	09/1992	09/2025	8.500%	121	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
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	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1231	Lower Granite	09/1993	09/2025	7.875%	26	0		
1232	Lower Granite	09/1993	09/2025	7.875%	3,272	0		
1233	Lower Granite	09/1994	09/2019	7.125%	38	0		
1234	Lower Granite	09/1994	09/2029	7.150%	3,543	0		
1235	Lower Granite	09/1995	09/2017	7.290%	77	0		
1236	Lower Granite	09/1995	09/2017	7.290%	388	0		
1237	Lower Granite	09/1995	09/2017	7.290%	458	0		
1238	Lower Granite	09/1995	09/2025	7.160%	96	0		
1239	Lower Granite	09/1996	09/2011	7.130%	255	0		
1240	Lower Granite	09/1996	09/2031	7.150%	206	0		
1241	Lower Granite	09/1996	09/2046	7.150%	9	0		
1242	Lower Granite	09/1996	09/2046	7.150%	625	0		
1243	Lower Granite	09/1997	09/2047	7.150%	677	0		
1244	Lower Granite	09/1999	09/2049	5.375%	856	0		
1245	Lower Granite	09/2001	09/2051	5.875%	2,025	0		
1246	Lower Granite	09/2002	09/2052	5.500%	1,275	0		
1247	Lower Granite	09/2003	09/2053	5.125%	42	0		
1248	Lower Granite	09/2005	09/2055	5.125%	393	0		
1249	Lower Granite	09/2008	09/2058	4.875%	24	24		
1250	Lower Granite	09/2009	09/2059	4.375%	5,669	5,669		
1251	Lower Granite	09/2010	09/2060	4.250%	1,156	1,156		
1252	Lower Granite	09/2011	09/2061	3.750%	8	8		
1253	Lower Granite	09/2014	09/2064	3.875%	2,644	2,644		
1254	Lower Granite	09/2015	09/2065	3.250%	1,597	1,597		
1255	Lower Granite	09/2016	09/2066	3.000%	1,878	1,878		
1256	Lower Monument	09/1969	09/2019	7.270%	26,974	0		
1257	Lower Monument	09/1970	09/2020	7.250%	51,218	0		
1258	Lower Monument	09/1971	09/2020	7.250%	214	0		
1259	Lower Monument	09/1972	09/2020	7.250%	214	0		
1260	Lower Monument	09/1973	09/2020	7.250%	214	0		
1261	Lower Monument	09/1974	09/2020	7.250%	214	0		
1262	Lower Monument	09/1975	09/2020	7.250%	214	0		
1263	Lower Monument	09/1976	09/2020	7.250%	214	0		
1264	Lower Monument	09/1977	09/2020	7.250%	214	0		
1265	Lower Monument	09/1978	09/2020	7.250%	214	0		
1266	Lower Monument	09/1979	09/2020	7.250%	214	0		
1267	Lower Monument	09/1979	09/2029	7.150%	40,669	0		
1268	Lower Monument	09/1980	09/2020	7.250%	214	0		
1269	Lower Monument	09/1981	09/2020	7.250%	214	0		
1270	Lower Monument	09/1982	09/2020	7.250%	214	0		
1271	Lower Monument	09/1983	09/2020	7.250%	214	0		
1272	Lower Monument	09/1985	09/2020	7.250%	8	0		
1273	Lower Monument	09/1985	09/2029	7.150%	256	0		
1274	Lower Monument	09/1986	09/2020	7.250%	132	0		
1275	Lower Monument	09/1987	09/2020	7.250%	3	0		
1276	Lower Monument	09/1987	09/2020	8.875%	50	0		
1277	Lower Monument	09/1988	09/2020	8.500%	1	0		
1278	Lower Monument	09/1988	09/2020	8.500%	58	0		
1279	Lower Monument	09/1989	09/2020	9.250%	93	0		
1280	Lower Monument	09/1990	09/2020	8.875%	358	0		
1281	Lower Monument	09/1991	09/2020	8.750%	594	0		
1282	Lower Monument	09/1992	09/2020	8.500%	4,484	0		
1283	Lower Monument	09/1993	09/2020	7.875%	24	0		
1284	Lower Monument	09/1993	09/2020	7.875%	2,175	0		
1285	Lower Monument	09/1994	09/2019	7.125%	107	0		
1286	Lower Monument	09/1994	09/2029	7.125%	2,167	0		
1287	Lower Monument	09/1995	09/2000	7.330%	6	0		
1288	Lower Monument	09/1995	09/2045	7.150%	41	0		
1289	Lower Monument	09/1995	09/2045	7.150%	99	0		
1290	Lower Monument	09/1995	09/2045	7.150%	624	0		
1291	Lower Monument	09/1995	09/2045	7.150%	1,122	0		
1292	Lower Monument	09/1996	09/2016	7.290%	668	0		
1293	Lower Monument	09/1996	09/2021	7.230%	37	0		
1294	Lower Monument	09/1996	09/2021	7.230%	51	0		
1295	Lower Monument	09/1996	09/2036	7.150%	264	0		
1296	Lower Monument	09/1996	09/2046	7.150%	10	0		
1297	Lower Monument	09/2001	09/2051	5.875%	3,301	0		
1298	Lower Monument	09/2002	09/2052	5.500%	29	0		
1299	Lower Monument	09/2003	09/2053	5.125%	22	0		
1300	Lower Monument	09/2004	09/2054	5.375%	3,423	0		
1301	Lower Monument	09/2005	09/2055	5.125%	527	0		
1302	Lower Monument	09/2006	09/2056	4.500%	285	285		
1303	Lower Monument	09/2008	09/2058	4.875%	9	9		
1304	Lower Monument	09/2009	09/2059	4.375%	2,332	2,332		
1305	Lower Monument	09/2012	09/2062	3.375%	89	89		
1306	Lower Monument	09/2014	09/2064	3.875%	1,430	1,430		
1307	Lower Monument	09/2016	09/2066	3.000%	155	155		
1308	Lower Monument	09/2017	09/2067	2.375%	942	942		
1309	Lower Snake Fish and Wildlife	09/1983	09/2033	7.150%	30,488	0		
1310	Lower Snake Fish and Wildlife	09/1985	09/2035	7.150%	47,921	0		
1311	Lower Snake Fish and Wildlife	09/1987	09/2037	7.150%	72,536	0		
1312	Lower Snake Fish and Wildlife	09/1988	09/2038	7.150%	805	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1313	Lower Snake Fish and Wildlife	09/1990	09/2040	7.150%	1,557	0		
1314	Lower Snake Fish and Wildlife	09/1991	09/2041	7.150%	4,411	0		
1315	Lower Snake Fish and Wildlife	09/1993	09/2043	7.150%	71,632	0		
1316	Lower Snake Fish and Wildlife	09/1994	09/2044	7.150%	4,722	0		
1317	Lower Snake Fish and Wildlife	09/1996	09/2046	7.150%	12,085	0		
1318	Lower Snake Fish and Wildlife	09/1997	09/2047	7.150%	2,173	0		
1319	Lower Snake Fish and Wildlife	09/1999	09/2049	5.375%	7	0		
1320	Lower Snake Fish and Wildlife	09/2000	09/2050	6.125%	1,529	0		
1321	Lower Snake Fish and Wildlife	09/2001	09/2051	5.875%	325	0		
1322	Lower Snake Fish and Wildlife	09/2002	09/2052	5.500%	890	0		
1323	Lower Snake Fish and Wildlife	09/2003	09/2053	5.125%	98	0		
1324	Lower Snake Fish and Wildlife	09/2004	09/2054	5.375%	230	0		
1325	Lower Snake Fish and Wildlife	09/2005	09/2055	5.125%	4	0		
1326	Lower Snake Fish and Wildlife	09/2006	09/2056	4.500%	379	379		
1327	Lower Snake Fish and Wildlife	09/2008	09/2058	4.875%	74	74		
1328	Lower Snake Fish and Wildlife	09/2009	09/2059	4.375%	1,540	1,540		
1329	Lower Snake Fish and Wildlife	09/2010	09/2060	4.250%	6	6		
1330	Lower Snake Fish and Wildlife	09/2011	09/2061	3.750%	122	122		
1331	Lower Snake Fish and Wildlife	09/2014	09/2064	3.875%	222	222		
1332	Lower Snake Fish and Wildlife	09/2016	09/2066	3.000%	1,256	1,256		
1333	Lower Snake Fish and Wildlife	09/2018	09/2068	2.750%	1,608	1,608		
1334	McNary	09/1954	09/2004	6.880%	80,256	0		
1335	McNary	09/1955	09/2005	6.910%	53,493	0		
1336	McNary	09/1956	09/2006	6.950%	38,748	0		
1337	McNary	09/1957	09/2007	6.980%	24,985	0		
1338	McNary	09/1958	09/2007	6.980%	468	0		
1339	McNary	09/1959	09/2007	6.980%	468	0		
1340	McNary	09/1960	09/2007	6.980%	468	0		
1341	McNary	09/1961	09/2007	6.980%	468	0		
1342	McNary	09/1962	09/2007	6.980%	467	0		
1343	McNary	09/1963	09/2007	6.980%	468	0		
1344	McNary	09/1964	09/2007	6.980%	468	0		
1345	McNary	09/1965	09/2007	6.980%	468	0		
1346	McNary	09/1966	09/2007	6.980%	468	0		
1347	McNary	09/1967	09/2007	6.980%	467	0		
1348	McNary	09/1968	09/2007	6.980%	468	0		
1349	McNary	09/1969	09/2007	6.980%	468	0		
1350	McNary	09/1970	09/2007	6.980%	468	0		
1351	McNary	09/1971	09/2007	6.980%	468	0		
1352	McNary	09/1972	09/2007	6.980%	468	0		
1353	McNary	09/1973	09/2007	6.980%	467	0		
1354	McNary	09/1974	09/2007	6.980%	468	0		
1355	McNary	09/1975	09/2007	6.980%	468	0		
1356	McNary	09/1976	09/2007	6.980%	468	0		
1357	McNary	09/1977	09/2007	6.980%	467	0		
1358	McNary	09/1978	09/2007	6.980%	468	0		
1359	McNary	09/1979	09/2007	6.980%	468	0		
1360	McNary	09/1980	09/2007	6.980%	468	0		
1361	McNary	09/1981	09/2007	6.980%	468	0		
1362	McNary	09/1982	09/2007	6.980%	467	0		
1363	McNary	09/1983	09/2007	6.980%	468	0		
1364	McNary	09/1985	09/2007	6.980%	557	0		
1365	McNary	09/1986	09/2007	6.980%	454	0		
1366	McNary	09/1987	09/2007	6.980%	24	0		
1367	McNary	09/1995	09/2010	7.090%	509	0		
1368	McNary	09/1995	09/2045	7.150%	16	0		
1369	McNary	09/1996	09/2006	6.950%	778	0		
1370	McNary	09/1996	09/2011	7.130%	3	0		
1371	McNary	09/1996	09/2026	7.150%	74	0		
1372	McNary	09/1996	09/2026	7.150%	277	0		
1373	McNary	09/1996	09/2046	7.150%	619	0		
1374	McNary	09/1997	09/2032	7.150%	30	0		
1375	McNary	09/2001	09/2051	5.875%	1,046	0		
1376	McNary	09/2003	09/2053	5.125%	97	0		
1377	McNary	09/2004	09/2054	5.375%	6,138	0		
1378	McNary	09/2005	09/2055	5.125%	550	0		
1379	McNary	09/2006	09/2056	4.500%	4,080	4,080		
1380	McNary	09/2008	09/2058	4.875%	215	215		
1381	McNary	09/2011	09/2061	3.750%	565	565		
1382	McNary	09/2012	09/2062	3.375%	11	11		
1383	McNary	09/2013	09/2063	2.875%	1,000	1,000		
1384	McNary	09/2014	09/2064	3.875%	759	759		
1385	McNary	09/2017	09/2067	2.375%	239	239		
1386	Minidoka/Palisades	09/1909	09/1959	3.000%	854	0		
1387	Minidoka/Palisades	09/1909	09/1959	3.000%	226	0		
1388	Minidoka/Palisades	09/1910	09/1960	3.000%	1,709	0		
1389	Minidoka/Palisades	09/1910	09/1960	3.000%	451	0		
1390	Minidoka/Palisades	09/1911	09/1961	3.000%	1,709	0		
1391	Minidoka/Palisades	09/1911	09/1961	3.000%	451	0		
1392	Minidoka/Palisades	09/1927	09/1977	3.000%	854	0		
1393	Minidoka/Palisades	09/1927	09/1977	3.000%	226	0		
1394	Minidoka/Palisades	09/1942	09/1992	3.000%	854	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1395	Minidoka/Palisades	09/1942	09/1992	3.000%	226	0		
1396	Minidoka/Palisades	09/1957	09/2007	3.000%	2,561	0		
1397	Minidoka/Palisades	09/1957	09/2007	3.000%	677	0		
1398	Minidoka/Palisades	09/1958	09/2008	3.000%	854	0		
1399	Minidoka/Palisades	09/1958	09/2008	3.000%	226	0		
1400	Minidoka/Palisades	09/1959	09/2008	3.000%	108	0		
1401	Minidoka/Palisades	09/1959	09/2008	3.000%	28	0		
1402	Minidoka/Palisades	09/1960	09/2008	3.000%	108	0		
1403	Minidoka/Palisades	09/1960	09/2008	3.000%	29	0		
1404	Minidoka/Palisades	09/1961	09/2008	3.000%	108	0		
1405	Minidoka/Palisades	09/1961	09/2008	3.000%	29	0		
1406	Minidoka/Palisades	09/1962	09/2008	3.000%	108	0		
1407	Minidoka/Palisades	09/1962	09/2008	3.000%	28	0		
1408	Minidoka/Palisades	09/1963	09/2008	3.000%	108	0		
1409	Minidoka/Palisades	09/1963	09/2008	3.000%	29	0		
1410	Minidoka/Palisades	09/1964	09/2008	3.000%	108	0		
1411	Minidoka/Palisades	09/1964	09/2008	3.000%	28	0		
1412	Minidoka/Palisades	09/1965	09/2008	3.000%	108	0		
1413	Minidoka/Palisades	09/1965	09/2008	3.000%	29	0		
1414	Minidoka/Palisades	09/1966	09/2008	3.000%	108	0		
1415	Minidoka/Palisades	09/1966	09/2008	3.000%	29	0		
1416	Minidoka/Palisades	09/1967	09/2008	3.000%	108	0		
1417	Minidoka/Palisades	09/1967	09/2008	3.000%	28	0		
1418	Minidoka/Palisades	09/1968	09/2008	3.000%	108	0		
1419	Minidoka/Palisades	09/1968	09/2008	3.000%	29	0		
1420	Minidoka/Palisades	09/1969	09/2008	3.000%	3	0		
1421	Minidoka/Palisades	09/1969	09/2008	3.000%	28	0		
1422	Minidoka/Palisades	09/1970	09/2008	3.000%	108	0		
1423	Minidoka/Palisades	09/1970	09/2008	3.000%	29	0		
1424	Minidoka/Palisades	09/1971	09/2008	3.000%	108	0		
1425	Minidoka/Palisades	09/1971	09/2008	3.000%	29	0		
1426	Minidoka/Palisades	09/1972	09/2008	3.000%	108	0		
1427	Minidoka/Palisades	09/1972	09/2008	3.000%	28	0		
1428	Minidoka/Palisades	09/1973	09/2008	3.000%	108	0		
1429	Minidoka/Palisades	09/1973	09/2008	3.000%	29	0		
1430	Minidoka/Palisades	09/1974	09/2008	3.000%	108	0		
1431	Minidoka/Palisades	09/1974	09/2008	3.000%	28	0		
1432	Minidoka/Palisades	09/1975	09/2008	3.000%	108	0		
1433	Minidoka/Palisades	09/1975	09/2008	3.000%	29	0		
1434	Minidoka/Palisades	09/1976	09/2008	3.000%	108	0		
1435	Minidoka/Palisades	09/1976	09/2008	3.000%	29	0		
1436	Minidoka/Palisades	09/1977	09/2008	7.020%	83	0		
1437	Minidoka/Palisades	09/1977	09/2008	7.020%	28	0		
1438	Minidoka/Palisades	09/1978	09/2008	7.020%	75	0		
1439	Minidoka/Palisades	09/1978	09/2008	7.020%	20	0		
1440	Minidoka/Palisades	09/1979	09/2008	7.020%	75	0		
1441	Minidoka/Palisades	09/1979	09/2008	7.020%	19	0		
1442	Minidoka/Palisades	09/1980	09/2008	7.020%	75	0		
1443	Minidoka/Palisades	09/1980	09/2008	7.020%	20	0		
1444	Minidoka/Palisades	09/1981	09/2008	7.020%	75	0		
1445	Minidoka/Palisades	09/1981	09/2008	7.020%	20	0		
1446	Minidoka/Palisades	09/1982	09/2008	7.020%	75	0		
1447	Minidoka/Palisades	09/1982	09/2008	7.020%	19	0		
1448	Minidoka/Palisades	09/1983	09/2008	7.020%	65	0		
1449	Minidoka/Palisades	09/1983	09/2008	7.020%	20	0		
1450	Minidoka/Palisades	09/1984	09/2008	10.075%	44	0		
1451	Minidoka/Palisades	09/1984	09/2008	10.075%	11	0		
1452	Minidoka/Palisades	09/1985	09/2008	7.020%	21	0		
1453	Minidoka/Palisades	09/1986	09/2008	7.020%	21	0		
1454	Minidoka/Palisades	09/1986	09/2008	11.375%	48	0		
1455	Minidoka/Palisades	09/1987	09/2008	7.020%	16	0		
1456	Minidoka/Palisades	09/1988	09/2008	8.500%	31	0		
1457	Minidoka/Palisades	09/1989	09/2008	9.250%	20	0		
1458	Minidoka/Palisades	09/1990	09/2008	8.875%	33	0		
1459	Minidoka/Palisades	09/1991	09/2008	8.750%	62	0		
1460	Minidoka/Palisades	09/1991	09/2008	8.750%	11	0		
1461	Minidoka/Palisades	09/1991	09/2008	8.750%	32	0		
1462	Minidoka/Palisades	09/1992	09/2008	8.500%	6	0		
1463	Minidoka/Palisades	09/1994	09/2029	7.125%	351	0		
1464	Minidoka/Palisades	09/1995	09/2000	7.330%	6	0		
1465	Minidoka/Palisades	09/1995	09/2010	7.890%	40	0		
1466	Minidoka/Palisades	09/1996	09/2011	7.130%	54	0		
1467	Minidoka/Palisades	09/1997	09/2007	6.950%	66	0		
1468	Minidoka/Palisades	09/1997	09/2047	7.150%	50,911	0		
1469	Minidoka/Palisades	09/2001	09/2051	5.875%	42	0		
1470	Minidoka/Palisades	09/2012	09/2062	3.375%	7	7		
1471	Minidoka/Palisades	09/2015	09/2065	3.250%	19,237	19,237		
1472	Minidoka/Palisades	09/2016	09/2066	3.000%	206	206		
1473	Minidoka/Palisades	09/2017	09/2067	2.375%	127	127		
1474	Minidoka/Palisades	09/2018	09/2068	2.750%	9	9		
1475	RRP - Green Springs	09/2001	09/2051	5.875%	11,145	0		
1476	RRP - Green Springs	09/2012	09/2062	3.375%	2	2		

**TABLE 12A:**  
**HISTORICAL INVESTMENTS**  
**October 1, 2018 - September 30, 2021 Cost Evaluation period**  
**(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1477	RRP - Green Springs	09/2013	09/2063	2.875%				
1478	The Dalles	09/1957	09/2007	2.500%	15,908	0		
1479	The Dalles	09/1958	09/2008	7.020%	45,837	0		
1480	The Dalles	09/1959	09/2009	7.060%	40,415	0		
1481	The Dalles	09/1960	09/2010	7.090%	39,179	0		
1482	The Dalles	09/1961	09/2011	7.130%	9,492	0		
1483	The Dalles	09/1962	09/2011	7.130%	56	0		
1484	The Dalles	09/1963	09/2011	7.130%	57	0		
1485	The Dalles	09/1964	09/2011	7.130%	57	0		
1486	The Dalles	09/1965	09/2011	7.130%	56	0		
1487	The Dalles	09/1966	09/2011	7.130%	57	0		
1488	The Dalles	09/1967	09/2011	7.130%	57	0		
1489	The Dalles	09/1968	09/2011	7.130%	56	0		
1490	The Dalles	09/1969	09/2011	7.130%	57	0		
1491	The Dalles	09/1970	09/2011	7.130%	57	0		
1492	The Dalles	09/1971	09/2011	7.130%	56	0		
1493	The Dalles	09/1972	09/2011	7.130%	57	0		
1494	The Dalles	09/1973	09/2011	7.130%	57	0		
1495	The Dalles	09/1973	09/2023	7.190%	21,983	0		
1496	The Dalles	09/1974	09/2011	7.130%	56	0		
1497	The Dalles	09/1974	09/2024	7.170%	7,268	0		
1498	The Dalles	09/1975	09/2011	7.130%	57	0		
1499	The Dalles	09/1976	09/2011	7.130%	57	0		
1500	The Dalles	09/1977	09/2011	7.130%	56	0		
1501	The Dalles	09/1978	09/2011	7.130%	57	0		
1502	The Dalles	09/1979	09/2011	7.130%	57	0		
1503	The Dalles	09/1980	09/2011	7.130%	56	0		
1504	The Dalles	09/1981	09/2011	7.130%	57	0		
1505	The Dalles	09/1982	09/2011	7.130%	57	0		
1506	The Dalles	09/1983	09/2011	7.130%	56	0		
1507	The Dalles	09/1984	09/2011	10.750%	961	0		
1508	The Dalles	09/1985	09/2011	7.130%	95	0		
1509	The Dalles	09/1985	09/2011	12.375%	280	0		
1510	The Dalles	09/1986	09/2011	7.130%	95	0		
1511	The Dalles	09/1986	09/2011	11.375%	4	0		
1512	The Dalles	09/1987	09/2011	7.130%	1,417	0		
1513	The Dalles	09/1987	09/2011	8.875%	81	0		
1514	The Dalles	09/1988	09/2011	8.500%	685	0		
1515	The Dalles	09/1988	09/2011	8.500%	1	0		
1516	The Dalles	09/1989	09/2011	9.250%	898	0		
1517	The Dalles	09/1990	09/2011	8.875%	319	0		
1518	The Dalles	09/1990	09/2011	8.875%	745	0		
1519	The Dalles	09/1991	09/2011	8.750%	89	0		
1520	The Dalles	09/1991	09/2011	8.750%	2,452	0		
1521	The Dalles	09/1992	09/2011	8.500%	57	0		
1522	The Dalles	09/1992	09/2011	8.500%	130	0		
1523	The Dalles	09/1993	09/2011	7.875%	2,028	0		
1524	The Dalles	09/1993	09/2011	7.875%	2,929	0		
1525	The Dalles	09/1994	09/2029	7.125%	1,425	0		
1526	The Dalles	09/1996	09/2008	7.020%	196	0		
1527	The Dalles	09/1996	09/2011	7.130%	457	0		
1528	The Dalles	09/1996	09/2046	7.150%	1,991	0		
1529	The Dalles	09/2000	09/2050	6.125%	2,588	0		
1530	The Dalles	09/2002	09/2052	5.500%	1,226	0		
1531	The Dalles	09/2004	09/2054	5.375%	182	0		
1532	The Dalles	09/2005	09/2055	5.125%	36,019	0		
1533	The Dalles	09/2006	09/2056	4.500%	2,030	2,030		
1534	The Dalles	09/2007	09/2057	5.000%	140	0		
1535	The Dalles	09/2008	09/2058	4.875%	1,651	1,651		
1536	The Dalles	09/2015	09/2065	3.250%	302	302		
1537	The Dalles	09/2016	09/2066	3.000%	4	4		
1538	The Dalles	09/2017	09/2067	2.375%	10	10		
1539	The Dalles	09/2018	09/2068	2.750%	14	14		
1540	Yakima Chandler/Kenniwick	09/1956	09/2022	7.210%	1,068	0		
1541	Yakima Chandler/Kenniwick	09/1956	09/2022	7.210%	481	0		
1542	Yakima Chandler/Kenniwick	09/1959	09/2022	7.210%	1	0		
1543	Yakima Chandler/Kenniwick	09/1960	09/2022	7.210%	1	0		
1544	Yakima Chandler/Kenniwick	09/1961	09/2022	7.210%	1	0		
1545	Yakima Chandler/Kenniwick	09/1984	09/2022	10.750%	10	0		
1546	Yakima Chandler/Kenniwick	09/1984	09/2022	10.750%	35	0		
1547	Yakima Chandler/Kenniwick	09/1985	09/2022	12.375%	357	0		
1548	Yakima Chandler/Kenniwick	09/1986	09/2022	7.210%	439	0		
1549	Yakima Chandler/Kenniwick	09/1986	09/2022	11.375%	7	0		
1550	Yakima Chandler/Kenniwick	09/1987	09/2022	8.875%	126	0		
1551	Yakima Chandler/Kenniwick	09/1989	09/2022	9.250%	18	0		
1552	Yakima Chandler/Kenniwick	09/1990	09/2022	8.875%	40	0		
1553	Yakima Chandler/Kenniwick	09/1991	09/2022	8.750%	109	0		
1554	Yakima Chandler/Kenniwick	09/2005	09/2055	5.125%	833	0		
1555	Yakima Chandler/Kenniwick	09/2009	09/2059	4.375%	15	15		
1556	Yakima Chandler/Kenniwick	09/2018	09/2068	2.750%	49	49		
1557	Yakima Roza	09/1958	09/2008	7.020%	1,194	0		
1558	Yakima Roza	09/1958	09/2008	7.020%	383	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1559	Yakima Roza	09/1984	09/2008	10.750%	17	0		
1560	Yakima Roza	09/1984	09/2008	10.750%	5	0		
1561	Yakima Roza	09/1985	09/2008	7.020%	69	0		
1562	Yakima Roza	09/1985	09/2008	12.375%	5	0		
1563	Yakima Roza	09/1986	09/2008	7.020%	6	0		
1564	Yakima Roza	09/1987	09/2008	7.020%	2	0		
1565	Yakima Roza	09/1987	09/2008	8.875%	9	0		
1566	Yakima Roza	09/2001	09/2051	5.875%	15	0		
1567	Bureau Direct	05/1995	05/2015	7.500%	35,000	0		
1568	Bureau Direct	05/1997	05/2000	6.500%	50,000	0		
1569	Bureau Direct	04/1998	05/2008	6.000%	25,000	0		
1570	Bureau Direct	09/1999	09/2004	6.400%	20,000	0		
1571	Bureau Direct	04/2000	04/2003	6.850%	40,000	0		
1572	Bureau Direct	09/2000	09/2005	6.700%	20,000	0		
1573	Bureau Direct	06/2001	06/2004	4.750%	50,000	0		
1574	Bureau Direct	03/2002	03/2005	4.600%	30,000	0		
1575	Bureau Direct	09/2002	09/2006	3.050%	20,000	0		
1576	Bureau Direct	12/2002	12/2006	3.050%	40,000	0		
1577	Bureau Direct	04/2003	04/2006	2.400%	40,000	0		
1578	Bureau Direct	04/2003	04/2006	2.400%	25,000	0		
1579	Bureau Direct	07/2003	07/2006	2.300%	30,000	0		
1580	Bureau Direct	09/2003	09/2006	2.500%	25,000	0		
1581	Bureau Direct	01/2004	01/2007	2.500%	25,000	0		
1582	Bureau Direct	04/2004	04/2007	2.950%	35,000	0		
1583	Bureau Direct	07/2004	07/2007	3.450%	25,000	0		
1584	Bureau Direct	09/2004	09/2007	3.100%	30,000	0		
1585	Bureau Direct	11/2004	11/2007	3.500%	20,000	0		
1586	Bureau Direct	01/2005	01/2008	3.600%	20,000	0		
1587	Bureau Direct	06/2005	06/2008	3.950%	30,000	0		
1588	Bureau Direct	09/2005	09/2008	4.250%	25,000	0		
1589	Bureau Direct	03/2006	03/2009	5.050%	25,000	0		
1590	Bureau Direct	07/2006	07/2009	5.350%	45,000	0		
1591	Bureau Direct	09/2006	09/2009	4.950%	15,000	0		
1592	Bureau Direct	01/2007	01/2010	5.100%	35,000	0		
1593	Bureau Direct	03/2007	03/2010	4.800%	30,000	0		
1594	Bureau Direct	06/2007	06/2010	5.350%	30,000	0		
1595	Bureau Direct	01/2008	01/2011	2.850%	35,000	0		
1596	Bureau Direct	01/2008	01/2011	2.850%	20,000	0		
1597	Bureau Direct	05/2008	05/2011	3.358%	35,000	0		
1598	Bureau Direct	05/2008	05/2011	3.358%	25,000	0		
1599	Bureau Direct	06/2008	06/2012	3.974%	30,000	0		
1600	Bureau Direct	07/2008	07/2012	3.913%	35,000	0		
1601	Bureau Direct	09/2008	09/2012	3.444%	35,000	0		
1602	Bureau Direct	01/2009	01/2021	3.999%	25,000	25,000		
1603	Bureau Direct	04/2009	04/2023	4.391%	25,000	25,000	04/2029	3.660%
1604	Bureau Direct	06/2009	06/2039	5.192%	25,000	25,000		
1605	Bureau Direct	09/2009	09/2019	3.699%	25,000	25,000		
1606	Bureau Direct	10/2009	10/2018	3.719%	24,000	0		
1607	Bureau Direct	10/2009	10/2019	3.842%	20,000	20,000		
1608	Bureau Direct	11/2009	11/2019	3.637%	7,000	7,000		
1609	Bureau Direct	12/2009	12/2019	4.194%	13,000	13,000		
1610	Bureau Direct	01/2010	01/2019	3.714%	10,000	0		
1611	Bureau Direct	02/2010	02/2019	0.165%	10,000	0		
1612	Bureau Direct	03/2010	03/2020	4.083%	30,000	30,000		
1613	Bureau Direct	04/2010	04/2020	3.973%	18,000	18,000	04/2029	3.720%
1614	Bureau Direct	05/2010	05/2020	3.574%	15,000	15,000	05/2029	3.720%
1615	Bureau Direct	06/2010	06/2020	3.243%	10,000	10,000	06/2029	3.720%
1616	Bureau Direct	06/2010	06/2020	3.243%	30,000	30,000	06/2029	3.720%
1617	Bureau Direct	07/2010	07/2020	3.118%	17,000	17,000	07/2029	3.720%
1618	Bureau Direct	08/2010	08/2020	0.165%	5,000	0		
1619	Bureau Direct	09/2010	09/2021	2.883%	22,000	22,000		
1620	Bureau Direct	10/2010	10/2034	4.211%	20,000	20,000		
1621	Bureau Direct	01/2011	09/2011	0.244%	20,000	0		
1622	Bureau Direct	01/2011	09/2011	0.244%	35,000	0		
1623	Bureau Direct	01/2011	01/2039	5.040%	35,000	35,000		
1624	Bureau Direct	02/2011	02/2040	4.995%	50,000	50,000		
1625	Bureau Direct	05/2011	09/2011	0.076%	35,000	0		
1626	Bureau Direct	05/2011	09/2011	0.076%	25,000	0		
1627	Bureau Direct	06/2011	06/2036	4.629%	30,000	30,000		
1628	Bureau Direct	06/2011	06/2038	4.700%	30,000	30,000		
1629	Bureau Direct	08/2011	08/2037	4.208%	30,000	30,000		
1630	Bureau Direct	09/2011	07/2041	3.825%	30,000	0		
1631	Bureau Direct	12/2011	12/2038	3.880%	35,000	0		
1632	Bureau Direct	01/2012	01/2038	3.893%	15,000	0		
1633	Bureau Direct	02/2012	02/2034	2.476%	55,000	55,000		
1634	Bureau Direct	06/2012	06/2041	3.666%	50,000	0		
1635	Bureau Direct	06/2012	09/2012	0.119%	30,000	0		
1636	Bureau Direct	08/2012	07/2042	3.834%	44,000	0		
1637	Bureau Direct	09/2012	09/2013	0.174%	35,000	0		
1638	Bureau Direct	09/2012	09/2042	3.668%	25,000	0		
1639	Bureau Direct	01/2013	01/2043	6.194%	70,000	0		
1640	Bureau Direct	02/2013	02/2043	5.993%	18,000	0		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1641	Bureau Direct	03/2013	03/2043	5.958%	15,000	0		
1642	Bureau Direct	04/2013	04/2043	5.633%	15,000	0		
1643	Bureau Direct	05/2013	05/2043	6.192%	18,000	0		
1644	Bureau Direct	06/2013	01/2039	2.497%	35,000	35,000		
1645	Bureau Direct	06/2013	06/2043	6.938%	21,000	0		
1646	Bureau Direct	07/2013	07/2034	7.164%	25,000	0		
1647	Bureau Direct	08/2013	08/2034	7.413%	15,000	0		
1648	Bureau Direct	11/2013	09/2014	0.140%	77,000	0		
1649	Bureau Direct	11/2013	09/2020	2.473%	51,000	51,000		
1650	Bureau Direct	11/2013	09/2021	2.812%	50,000	50,000		
1651	Bureau Direct	11/2013	09/2022	3.125%	19,000	19,000		
1652	Bureau Direct	01/2014	12/2018	1.943%	43,000	0		
1653	Bureau Direct	01/2014	12/2018	1.943%	38,000	0		
1654	Bureau Direct	01/2014	12/2018	1.943%	21,000	0		
1655	Bureau Direct	01/2014	12/2018	1.943%	26,000	0		
1656	Bureau Direct	01/2014	12/2018	1.943%	14,000	0		
1657	Bureau Direct	09/2014	05/2032	2.544%	16,000	16,000		
1658	Bureau Direct	09/2014	05/2032	2.544%	10,000	10,000		
1659	Bureau Direct	09/2014	06/2033	2.530%	11,000	11,000		
1660	Bureau Direct	09/2014	06/2033	2.530%	12,000	12,000		
1661	Bureau Direct	09/2014	07/2033	2.497%	15,000	15,000		
1662	Bureau Direct	09/2015	09/2033	3.134%	10,000	10,000		
1663	Bureau Direct	04/2016	04/2031	2.661%	17,000	17,000		
1664	Bureau Direct	07/2016	07/2030	2.145%	12,000	12,000		
1665	Bureau Direct	08/2018	01/2045	2.497%	13,000	13,000		
1666	Bureau Direct	08/2018	02/2045	2.476%	5,000	5,000		
1667	Bureau Direct	08/2018	03/2045	2.455%	26,000	26,000		
1668	Bureau Direct	08/2018	06/2045	2.530%	16,000	16,000		
1669	Bureau Direct	09/2018	02/2045	2.476%	29,000	29,000		
1670	Bureau Direct	10/2018	09/2019	2.653%	24,000	24,000		
1671	Bureau Direct	12/2018	09/2019	2.568%	13,000	13,000		
1672	Bureau Direct	12/2018	09/2019	2.568%	14,000	14,000		
1673	Bureau Direct	12/2018	09/2019	2.568%	21,000	21,000		
1674	Bureau Direct	12/2018	09/2019	2.568%	38,000	38,000		
1675	Bureau Direct	12/2018	09/2029	3.100%	13,000	13,000		
1676	Bureau Direct	12/2018	09/2029	3.100%	43,000	43,000		
1677	Bureau Direct	01/2019	09/2019	2.521%	10,000	10,000		
1678	Conservation	09/1983	09/2003	12.200%	140,000	0		
1679	Conservation	09/1984	09/2004	13.050%	150,000	0		
1680	Conservation	09/1985	09/1990	10.150%	50,000	0		
1681	Conservation	03/1986	03/1991	7.800%	50,000	0		
1682	Conservation	03/1986	03/1996	8.150%	50,000	0		
1683	Conservation	04/1987	04/2007	9.300%	75,000	0		
1684	Conservation	06/1987	06/1992	8.350%	50,000	0		
1685	Conservation	04/1988	04/2008	9.900%	90,000	0		
1686	Conservation	07/1989	07/2009	8.550%	40,000	0		
1687	Conservation	09/1989	09/1995	8.600%	66,000	0		
1688	Conservation	09/1989	09/2002	8.650%	66,000	0		
1689	Conservation	07/1992	07/1997	5.800%	80,200	0		
1690	Conservation	07/1992	07/2007	7.140%	100,000	0		
1691	Conservation	10/1992	10/2012	8.050%	50,000	0		
1692	Conservation	02/1993	02/2013	7.400%	50,000	0		
1693	Conservation	08/1993	08/2013	6.750%	40,000	0		
1694	Conservation	01/1994	01/2014	6.750%	50,000	0		
1695	Conservation	05/1994	05/1998	7.100%	50,000	0		
1696	Conservation	05/1995	05/2015	7.500%	85,000	0		
1697	Conservation	01/1996	01/2011	6.700%	30,000	0		
1698	Conservation	11/1996	11/2016	7.200%	40,000	0		
1699	Conservation	05/1998	05/2009	6.000%	37,700	0		
1700	Conservation	09/1998	09/2008	5.300%	104,300	0		
1701	Conservation	09/1998	09/2013	5.600%	52,800	0		
1702	Conservation	07/2000	07/2003	6.950%	32,000	0		
1703	Conservation	06/2002	06/2005	3.750%	40,000	0		
1704	Conservation	01/2004	01/2008	2.950%	30,000	0		
1705	Conservation	03/2006	03/2009	5.050%	20,000	0		
1706	Conservation	06/2007	06/2010	5.350%	20,000	0		
1707	Conservation	09/2008	09/2013	3.701%	10,000	0		
1708	Conservation	09/2009	09/2014	2.746%	15,000	0		
1709	Conservation	01/2010	01/2015	2.609%	15,000	0		
1710	Conservation	04/2010	04/2015	2.677%	20,000	0		
1711	Conservation	08/2010	08/2015	1.619%	15,000	0		
1712	Conservation	09/2010	09/2015	1.534%	10,000	0		
1713	Conservation	01/2011	01/2023	4.046%	40,000	40,000		
1714	Conservation	04/2011	04/2023	3.932%	35,000	35,000		
1715	Conservation	08/2011	08/2023	3.206%	40,000	0		
1716	Conservation	10/2011	08/2012	0.204%	55,000	0		
1717	Conservation	12/2011	12/2037	0.189%	55,000	0		
1718	Conservation	05/2012	09/2015	0.676%	30,000	0		
1719	Conservation	06/2012	09/2015	0.671%	15,000	0		
1720	Conservation	08/2012	08/2024	2.788%	15,000	0		
1721	Conservation	11/2012	11/2016	0.630%	20,000	0		
1722	Conservation	01/2013	01/2018	1.107%	9,000	0		



**TABLE 12A:  
HISTORICAL INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1723	Conservation	03/2013	03/2025	4.992%	10,000	0		
1724	Conservation	04/2013	04/2025	4.553%	12,000	0		
1725	Conservation	08/2013	08/2025	6.973%	5,000	0		
1726	Conservation	10/2013	10/2025	3.568%	34,000	1,000		
1727	Conservation	11/2013	09/2023	3.375%	27,000	27,000		
1728	Conservation	12/2013	12/2021	3.142%	6,000	6,000		
1729	Conservation	12/2013	12/2023	2.530%	55,000	55,000		
1730	Conservation	01/2014	01/2026	3.621%	5,000	5,000		
1731	Conservation	04/2014	06/2025	2.530%	30,000	30,000		
1732	Conservation	05/2014	04/2024	2.497%	15,000	15,000		
1733	Conservation	05/2014	04/2025	2.497%	3,000	3,000		
1734	Conservation	06/2014	10/2024	2.497%	5,000	5,000		
1735	Conservation	07/2014	07/2025	2.497%	12,000	12,000		
1736	Conservation	08/2014	09/2025	2.455%	4,000	4,000		
1737	Conservation	10/2014	12/2024	2.530%	10,000	10,000		
1738	Conservation	11/2014	03/2027	2.455%	6,000	6,000		
1739	Conservation	12/2014	12/2023	2.403%	7,000	7,000	12/2026	3.680%
1740	Conservation	01/2015	09/2015	0.204%	15,000	0		
1741	Conservation	01/2015	01/2024	1.908%	7,000	0		
1742	Conservation	02/2015	02/2024	2.251%	8,000	0		
1743	Conservation	03/2015	03/2025	2.295%	5,000	0		
1744	Conservation	04/2015	04/2024	2.269%	5,000	5,000	04/2027	3.680%
1745	Conservation	05/2015	05/2021	1.898%	5,000	5,000		
1746	Conservation	07/2015	07/2021	2.067%	14,000	14,000		
1747	Conservation	08/2015	08/2022	2.233%	6,000	6,000		
1748	Conservation	09/2015	09/2022	2.062%	4,000	4,000		
1749	Conservation	10/2015	10/2027	2.497%	25,000	25,000		
1750	Conservation	11/2016	04/2017	0.684%	20,000	0		
1751	Conservation	04/2017	01/2018	1.051%	20,000	0		
1752	Conservation	01/2018	09/2022	2.513%	9,000	9,000		
1753	Conservation	01/2018	09/2022	2.513%	20,000	20,000		
1754	Construction (AS)	10/1992	10/2032	8.350%	38	0		
1755	Construction (AS)	07/1995	07/2025	7.700%	67	0		
1756	Construction (AS)	01/1996	01/2003	5.900%	5,622	0		
1757	Construction (AS)	01/1997	01/2004	6.800%	7,400	0		
1758	Construction (AS)	08/1998	08/2008	5.750%	3,181	0		
1759	Construction (AS)	02/1999	02/2014	5.900%	950	0		
1760	Construction (AS)	07/2000	07/2004	7.000%	10,948	0		
1761	Construction (AS)	01/2001	01/2010	6.050%	68	0		
1762	Construction (AS)	03/2002	03/2005	4.600%	1,990	0		
1763	Construction (AS)	10/2002	10/2005	3.000%	45,062	0		
1764	Construction (AS)	01/2004	01/2007	2.500%	13,357	0		
1765	Construction (AS)	11/2004	11/2008	3.750%	7,990	0		
1766	Construction (AS)	09/2006	09/2010	4.950%	9,681	0		
1767	Construction (AS)	01/2008	01/2012	3.200%	10,000	0		
1768	Construction (AS)	09/2008	09/2012	3.444%	10,000	0		
1769	Construction (AS)	09/2009	09/2014	2.746%	14,000	0		
1770	Construction (AS)	02/2010	02/2015	0.165%	7,500	0		
1771	Construction (AS)	08/2010	08/2015	1.619%	5,000	0		
1772	Construction (AS)	06/2011	06/2016	1.957%	7,000	0		
1773	Construction (AS)	08/2011	08/2016	1.423%	3,500	0		
1774	Construction (AS)	01/2012	09/2012	0.146%	10,000	0		
1775	Construction (AS)	06/2012	09/2015	0.671%	7,700	0		
1776	Construction (AS)	11/2012	11/2018	1.109%	5,250	5,250		
1777	Construction (AS)	04/2013	04/2017	0.622%	2,450	0		
1778	Construction (AS)	06/2013	06/2017	1.271%	3,000	0		
1779	Construction (AS)	08/2013	08/2017	1.494%	2,000	0		
1780	Construction (AS)	10/2013	10/2019	2.039%	4,200	4,200		
1781	Construction (AS)	10/2013	10/2019	2.039%	5,000	5,000		
1782	Construction (AS)	01/2014	01/2020	2.183%	1,750	1,750		
1783	Construction (AS)	01/2014	01/2020	2.183%	2,000	2,000		
1784	Construction (AS)	02/2014	09/2014	0.117%	950	0		
1785	Construction (AS)	04/2014	03/2020	2.455%	1,400	1,400		
1786	Construction (AS)	04/2014	03/2020	2.455%	2,000	2,000		
1787	Construction (AS)	05/2014	04/2020	2.497%	700	700		
1788	Construction (AS)	07/2014	07/2020	2.497%	1,050	1,050		
1789	Construction (AS)	11/2014	11/2020	1.809%	2,100	2,100		
1790	Construction (AS)	12/2014	12/2020	1.922%	1,050	1,050		
1791	Construction (AS)	02/2015	02/2021	1.761%	1,750	1,750		
1792	Construction (AS)	05/2015	05/2021	1.898%	2,100	2,100		
1793	Construction (AS)	09/2015	09/2017	0.744%	7,700	0		
1794	Construction (AS)	10/2015	10/2021	1.942%	2,800	2,800		
1795	Construction (AS)	02/2016	02/2022	2.476%	3,000	3,000		
1796	Construction (AS)	06/2016	09/2016	0.436%	7,000	0		
1797	Construction (AS)	04/2017	01/2018	1.051%	2,450	0		
1798	Construction (AS)	06/2017	01/2018	1.179%	3,000	0		
1799	Construction (AS)	08/2017	01/2018	1.138%	2,000	0		
1800	Construction (AS)	09/2017	01/2018	1.181%	7,700	0		
1801	Construction (AS)	09/2018	12/2023	3.064%	4,200	4,200		
1802	Corps	09/2015	09/2033	3.134%	4,000	4,000		
1803	Corps	02/2016	02/2045	2.476%	3,000	3,000		
1804	Corps	04/2016	04/2031	2.661%	53,000	53,000		

**TABLE 12A:  
HISTORICAL INVESTMENTS  
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(\$000s) (FY 2021)**

	A	B	C	D	E	F	G	
	Project	In Service Date	Due Date	Interest Rate	Initial Principal	Current Principal	Roll Maturity Date	Rollover Rate
1805	Corps	05/2016	05/2030	2.599%	15,000	15,000		
1806	Corps	07/2016	07/2030	2.145%	25,000	25,000		
1807	Corps	08/2018	07/2046	2.497%	32,000	32,000		
1808	Corps	08/2018	10/2046	2.497%	27,000	27,000		
1809	Corps	08/2018	11/2046	2.544%	25,000	25,000		
1810	Corps	08/2018	02/2047	2.476%	7,000	7,000		
1811	Corps	08/2018	03/2047	2.455%	24,000	24,000		
1812	Corps	08/2018	05/2047	2.544%	21,000	21,000		
1813	Corps	08/2018	06/2047	2.530%	24,000	24,000		
1814	Corps	09/2018	01/2048	2.497%	2,000	2,000		
1815	Corps	09/2018	03/2048	2.455%	54,200	54,200		
1816	Corps	09/2018	07/2048	2.497%	64,000	64,000		
1817	Corps	09/2018	08/2048	2.476%	17,000	17,000		
1818	Fish and Wildlife	05/1989	05/1999	8.950%	25,000	0		
1819	Fish and Wildlife	05/1991	05/1996	7.950%	50,000	0		
1820	Fish and Wildlife	02/1993	02/2008	6.950%	20,000	0		
1821	Fish and Wildlife	09/1994	09/1999	7.650%	20,000	0		
1822	Fish and Wildlife	08/1995	08/2010	7.200%	35,000	0		
1823	Fish and Wildlife	01/1998	01/2013	6.100%	60,000	0		
1824	Fish and Wildlife	09/1999	09/2003	6.300%	20,000	0		
1825	Fish and Wildlife	01/2001	01/2005	5.650%	25,000	0		
1826	Fish and Wildlife	09/2003	09/2007	3.100%	20,000	0		
1827	Fish and Wildlife	09/2005	09/2008	4.250%	20,000	0		
1828	Fish and Wildlife	09/2006	09/2010	4.950%	20,000	0		
1829	Fish and Wildlife	06/2007	06/2010	5.350%	30,000	0		
1830	Fish and Wildlife	09/2007	09/2011	4.700%	20,000	0		
1831	Fish and Wildlife	09/2008	09/2012	3.444%	20,000	0		
1832	Fish and Wildlife	06/2009	06/2024	4.556%	20,000	20,000		
1833	Fish and Wildlife	12/2009	12/2018	4.069%	26,000	0		
1834	Fish and Wildlife	08/2010	08/2019	2.646%	20,000	20,000		
1835	Fish and Wildlife	01/2011	01/2026	4.440%	50,000	50,000		
1836	Fish and Wildlife	02/2011	02/2026	4.398%	15,000	15,000		
1837	Fish and Wildlife	06/2011	06/2026	4.205%	15,000	15,000		
1838	Fish and Wildlife	01/2012	01/2038	3.893%	30,000	0		
1839	Fish and Wildlife	05/2012	05/2029	0.140%	5,000	0		
1840	Fish and Wildlife	06/2012	06/2041	3.666%	11,000	0		
1841	Fish and Wildlife	08/2012	08/2027	3.090%	11,000	0		
1842	Fish and Wildlife	11/2012	11/2027	5.046%	25,000	0		
1843	Fish and Wildlife	01/2013	09/2013	0.149%	60,000	0		
1844	Fish and Wildlife	03/2013	03/2028	5.445%	10,000	0		
1845	Fish and Wildlife	04/2013	04/2028	5.042%	6,000	0		
1846	Fish and Wildlife	06/2013	06/2028	6.607%	8,000	0		
1847	Fish and Wildlife	08/2013	08/2028	7.249%	5,000	0		
1848	Fish and Wildlife	10/2013	12/2026	3.717%	28,000	28,000		
1849	Fish and Wildlife	10/2013	05/2027	3.762%	11,000	11,000		
1850	Fish and Wildlife	10/2013	10/2028	3.880%	22,000	22,000		
1851	Fish and Wildlife	11/2013	09/2022	3.125%	31,000	31,000		
1852	Fish and Wildlife	11/2013	09/2023	3.375%	23,000	23,000	09/2028	3.610%
1853	Fish and Wildlife	11/2013	05/2027	2.544%	5,000	5,000		
1854	Fish and Wildlife	01/2014	01/2029	3.896%	7,000	7,000		
1855	Fish and Wildlife	04/2014	02/2029	2.476%	7,000	7,000		
1856	Fish and Wildlife	05/2014	04/2027	2.497%	11,000	11,000		
1857	Fish and Wildlife	08/2014	07/2029	2.497%	5,000	5,000		
1858	Fish and Wildlife	10/2014	01/2029	2.497%	15,000	15,000		
1859	Fish and Wildlife	11/2014	03/2030	2.455%	8,000	8,000		
1860	Fish and Wildlife	01/2015	01/2024	1.908%	5,000	0		
1861	Fish and Wildlife	03/2015	03/2028	2.511%	3,000	3,000		
1862	Fish and Wildlife	10/2015	02/2031	2.476%	4,000	4,000		
1863	Fish and Wildlife	10/2015	03/2031	2.455%	5,000	5,000		
1864	Fish and Wildlife	02/2016	02/2031	2.476%	4,000	4,000		
1865	Fish and Wildlife	09/2018	09/2033	3.550%	18,000	18,000		
1866	Fish and Wildlife	12/2018	09/2019	2.568%	26,000	26,000		
1867	Technology (G)	01/2015	01/2021	1.469%	35,000	35,000		
1868	Technology (G)	10/2015	07/2022	2.497%	6,000	6,000		
1869	<b>Totals:</b>				<b>\$13,015,454</b>	<b>\$3,589,714</b>		

**TABLE 12B:  
PROJECTED INVESTMENTS  
October 1, 2018 - September 30, 2021 Cost Evaluation period  
(\$000s) (FY 2021)**

A	B	C	D	E	
	Project	In Service Date	Due Date	Interest Rate	Current Principal
1	Bureau Direct	07/2020	07/2050	3.590%	40,000
2	Bureau Direct	08/2020	08/2050	3.590%	40,000
3	Bureau Direct	09/2020	09/2050	3.590%	42,000
4	Bureau Direct	07/2021	09/2021	3.760%	62,000
5	Bureau Direct	08/2021	09/2021	3.760%	62,000
6	Bureau Direct	09/2021	09/2042	4.000%	65,000
7	Columbia River Fish Mitigation	09/2019	09/2069	3.130%	87,381
8	Columbia River Fish Mitigation	09/2020	09/2070	3.440%	35,551
9	Columbia River Fish Mitigation	09/2021	09/2071	3.620%	57,057
11	Construction (AS)	09/2020	09/2025	3.590%	6,000
12	Construction (AS)	09/2021	09/2027	3.680%	18,000
13	Corps	07/2020	09/2020	3.590%	33,900
14	Corps	07/2020	07/2050	3.590%	9,100
15	Corps	08/2020	08/2050	3.590%	43,000
16	Corps	09/2020	09/2050	3.590%	45,000
17	Corps	07/2021	09/2021	3.760%	121,000
18	Corps	07/2021	09/2021	3.760%	11,000
19	Corps	08/2021	09/2021	3.760%	104,000
20	Corps	08/2021	08/2051	4.150%	28,000
21	Corps	09/2021	09/2051	4.150%	138,000
22	Fish and Wildlife	09/2020	09/2035	3.590%	47,000
23	Fish and Wildlife	09/2021	09/2036	3.910%	129,000
24	Technology (G)	09/2020	09/2025	3.590%	4,000
25	Technology (G)	09/2021	09/2022	3.740%	26,000
26	<b>Totals:</b>				<b>\$1,253,989</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
1	2019 Albeni Falls	Historical	99	4.322%	4	-	-	4
2	2019 Boise	Historical	199	3.728%	7	-	-	7
3	2019 Bonneville Dam	Historical	32,739	4.378%	1,433	-	-	1,433
4	2019 Chief Joseph	Historical	28,269	4.435%	1,254	-	-	1,254
5	2019 Columbia Basin	Historical	12,765	3.516%	449	-	-	449
6	2019 Columbia River Fish Mitigation	Historical	1,191,246	3.865%	46,042	-	-	46,042
7	2019 Cougar	Historical	4,813	3.034%	146	-	-	146
8	2019 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
9	2019 Dworshak	Historical	2,390	4.381%	105	-	-	105
10	2019 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
11	2019 Hills Creek	Historical	154	3.404%	5	-	-	5
12	2019 Hungry Horse Dam	Historical	1,434	4.108%	59	-	-	59
13	2019 Ice Harbor	Historical	7,502	3.711%	278	-	-	278
14	2019 John Day	Historical	9,021	3.660%	330	-	-	330
15	2019 Libby	Historical	2,056	4.477%	92	-	-	92
16	2019 Little Goose	Historical	5,987	3.624%	217	-	-	217
17	2019 Lookout Dam	Historical	311	3.396%	11	-	-	11
18	2019 Lost Creek	Historical	7	3.748%	-	-	-	-
19	2019 Lower Granite	Historical	12,977	3.925%	509	-	-	509
20	2019 Lower Monument	Historical	5,244	3.829%	201	-	-	201
21	2019 Lower Snake Fish and Wildlife	Historical	5,206	3.521%	183	-	-	183
22	2019 McNary	Historical	6,869	4.069%	279	-	-	279
23	2019 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
24	2019 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
25	2019 The Dalles	Historical	4,010	4.548%	182	-	-	182
26	2019 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
27	2019 Bureau Direct	Historical	879,000	3.438%	30,223	-	96	30,319
28	2019 Bureau Direct	New	176,000	2.108%	3,710	-	-	3,710
29	2019 Conservation	Historical	349,000	2.885%	10,069	-	-	10,069
30	2019 Construction (AS)	Historical	40,350	1.934%	780	-	12	792
31	2019 Corps	Historical	397,200	2.269%	9,011	-	921	9,932
32	2019 Fish and Wildlife	Historical	327,000	3.542%	11,582	-	(48)	11,534
33	2019 Fish and Wildlife	New	26,000	1.926%	501	-	-	501
34	2019 Technology (G)	Historical	41,000	1.619%	664	-	-	664
35	2019 Float	Historical	-	-	(2,151)	-	-	(2,151)
36	<b>FY 2019 Subtotal:</b>		<b>3,589,714</b>		<b>116,854</b>		<b>981</b>	<b>117,836</b>
37	2020 Albeni Falls	Historical	99	4.322%	4	-	-	4
38	2020 Boise	Historical	135	3.187%	4	-	-	4
39	2020 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
40	2020 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
41	2020 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
42	2020 Columbia River Fish Mitigation	Historical	1,081,580	3.671%	39,699	-	-	39,699
43	2020 Cougar	Historical	4,813	3.034%	146	-	-	146
44	2020 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
45	2020 Dworshak	Historical	2,380	4.379%	104	-	-	104
46	2020 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
47	2020 Hills Creek	Historical	154	3.404%	5	-	-	5
48	2020 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
49	2020 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
50	2020 John Day	Historical	8,420	3.600%	303	-	-	303
51	2020 Libby	Historical	489	3.203%	16	-	-	16
52	2020 Little Goose	Historical	5,974	3.622%	216	-	-	216
53	2020 Lookout Dam	Historical	311	3.396%	11	-	-	11
54	2020 Lost Creek	Historical	7	3.748%	-	-	-	-
55	2020 Lower Granite	Historical	12,953	3.923%	508	-	-	508
56	2020 Lower Monument	Historical	4,949	3.788%	188	-	-	188
57	2020 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
58	2020 McNary	Historical	2,573	3.318%	85	-	-	85
59	2020 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
60	2020 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
61	2020 The Dalles	Historical	329	3.200%	11	-	-	11
62	2020 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
63	2020 Bureau Direct	Historical	910,000	3.371%	30,679	-	(1,430)	29,249
64	2020 Bureau Direct	New	80,000	-	-	-	358	358
65	2020 Conservation	Historical	349,000	2.885%	10,069	-	-	10,069
66	2020 Construction (AS)	Historical	35,100	1.727%	606	-	(103)	503
67	2020 Construction (AS)	New	6,000	-	-	-	-	-
68	2020 Corps	Historical	397,200	2.504%	9,947	-	-	9,947
69	2020 Corps	New	86,000	0.236%	203	-	184	387
70	2020 Fish and Wildlife	Historical	307,000	3.600%	11,051	-	-	11,051
71	2020 Technology (G)	Historical	41,000	1.619%	664	-	-	664
72	2020 Float	Historical	-	-	(1,225)	-	-	(1,225)
73	<b>FY 2020 Subtotal:</b>		<b>3,425,761</b>		<b>106,680</b>		<b>(990)</b>	<b>105,690</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
74	2021 Albeni Falls	Historical	99	4.322%	4	-	-	4
75	2021 Boise	Historical	135	3.187%	4	-	-	4
76	2021 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
77	2021 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
78	2021 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
79	2021 Columbia River Fish Mitigation	Historical	1,117,131	3.663%	40,922	-	-	40,922
80	2021 Cougar	Historical	4,813	3.034%	146	-	-	146
81	2021 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
82	2021 Dworshak	Historical	2,380	4.379%	104	-	-	104
83	2021 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
84	2021 Hills Creek	Historical	154	3.404%	5	-	-	5
85	2021 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
86	2021 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
87	2021 John Day	Historical	8,420	3.600%	303	-	-	303
88	2021 Libby	Historical	489	3.203%	16	-	-	16
89	2021 Little Goose	Historical	5,974	3.622%	216	-	-	216
90	2021 Lookout Dam	Historical	311	3.396%	11	-	-	11
91	2021 Lost Creek	Historical	7	3.748%	-	-	-	-
92	2021 Lower Granite	Historical	12,953	3.923%	508	-	-	508
93	2021 Lower Monument	Historical	4,949	3.788%	188	-	-	188
94	2021 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
95	2021 McNary	Historical	2,573	3.318%	85	-	-	85
96	2021 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
97	2021 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
98	2021 The Dalles	Historical	329	3.200%	11	-	-	11
99	2021 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
100	2021 Bureau Direct	Historical	910,928	3.427%	31,220	-	(166)	31,054
101	2021 Bureau Direct	New	124,000	0.470%	583	-	-	583
102	2021 Conservation	Historical	349,000	2.885%	10,069	-	(80)	9,990
103	2021 Construction (AS)	Historical	23,000	2.421%	557	-	(34)	523
104	2021 Construction (AS)	New	18,000	-	-	-	-	-
105	2021 Corps	Historical	494,300	2.717%	13,429	-	-	13,429
106	2021 Corps	New	264,000	0.437%	1,153	-	98	1,251
107	2021 Fish and Wildlife	Historical	354,000	3.598%	12,738	-	-	12,738
108	2021 Fish and Wildlife	New	129,000	-	-	-	-	-
109	2021 Technology (G)	Historical	45,000	1.223%	550	-	(85)	466
110	2021 Technology (G)	New	26,000	-	-	-	-	-
111	2021 Float	Historical	-	-	(2,874)	-	-	(2,874)
112	<b>FY 2021 Subtotal:</b>		<b>3,987,240</b>		<b>113,334</b>	-	<b>(266)</b>	<b>113,068</b>
113	2022 Albeni Falls	Historical	99	4.322%	4	-	-	4
114	2022 Boise	Historical	135	3.187%	4	-	-	4
115	2022 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
116	2022 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
117	2022 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
118	2022 Columbia River Fish Mitigation	Historical	1,174,188	3.661%	42,988	-	-	42,988
119	2022 Cougar	Historical	4,813	3.034%	146	-	-	146
120	2022 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
121	2022 Dworshak	Historical	2,380	4.379%	104	-	-	104
122	2022 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
123	2022 Hills Creek	Historical	154	3.404%	5	-	-	5
124	2022 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
125	2022 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
126	2022 John Day	Historical	8,420	3.600%	303	-	-	303
127	2022 Libby	Historical	489	3.203%	16	-	-	16
128	2022 Little Goose	Historical	5,974	3.622%	216	-	-	216
129	2022 Lookout Dam	Historical	311	3.396%	11	-	-	11
130	2022 Lost Creek	Historical	7	3.748%	-	-	-	-
131	2022 Lower Granite	Historical	12,953	3.923%	508	-	-	508
132	2022 Lower Monument	Historical	4,949	3.788%	188	-	-	188
133	2022 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
134	2022 McNary	Historical	2,573	3.318%	85	-	-	85
135	2022 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
136	2022 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
137	2022 The Dalles	Historical	329	3.200%	11	-	-	11
138	2022 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
139	2022 Bureau Direct	Historical	878,863	3.084%	27,101	-	(1,525)	25,577
140	2022 Conservation	Historical	330,000	2.906%	9,591	-	(58)	9,532
141	2022 Construction (AS)	Historical	34,000	3.149%	1,071	-	(29)	1,042
142	2022 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
143	2022 Fish and Wildlife	Historical	483,000	3.587%	17,326	-	(228)	17,099
144	2022 Replacements	New	213,150	2.075%	4,423	-	-	4,423
145	2022 Technology (G)	Historical	36,000	3.516%	1,266	-	(25)	1,241
146	2022 Float	Historical	-	-	(2,091)	-	-	(2,091)
147	<b>FY 2022 Subtotal:</b>		<b>3,942,382</b>		<b>126,975</b>	-	<b>(1,864)</b>	<b>125,111</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
148	2023 Albeni Falls	Historical	99	4.322%	4	-	-	4
149	2023 Boise	Historical	135	3.187%	4	-	-	4
150	2023 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
151	2023 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
152	2023 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
153	2023 Columbia River Fish Mitigation	Historical	1,172,748	3.660%	42,923	-	-	42,923
154	2023 Cougar	Historical	4,813	3.034%	146	-	-	146
155	2023 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
156	2023 Dworshak	Historical	2,380	4.379%	104	-	-	104
157	2023 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
158	2023 Hills Creek	Historical	154	3.404%	5	-	-	5
159	2023 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
160	2023 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
161	2023 John Day	Historical	8,420	3.600%	303	-	-	303
162	2023 Libby	Historical	489	3.203%	16	-	-	16
163	2023 Little Goose	Historical	5,974	3.622%	216	-	-	216
164	2023 Lookout Dam	Historical	311	3.396%	11	-	-	11
165	2023 Lost Creek	Historical	7	3.748%	-	-	-	-
166	2023 Lower Granite	Historical	12,953	3.923%	508	-	-	508
167	2023 Lower Monument	Historical	4,949	3.788%	188	-	-	188
168	2023 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
169	2023 McNary	Historical	2,573	3.318%	85	-	-	85
170	2023 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
171	2023 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
172	2023 The Dalles	Historical	329	3.200%	11	-	-	11
173	2023 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
174	2023 Bureau Direct	Historical	690,000	3.293%	22,720	-	(456)	22,265
175	2023 Conservation	Historical	285,000	2.717%	7,742	-	(838)	6,904
176	2023 Construction (AS)	Historical	28,200	3.569%	1,006	-	-	1,006
177	2023 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
178	2023 Fish and Wildlife	Historical	432,000	3.681%	15,902	-	-	15,902
179	2023 Replacements	Historical	213,150	4.150%	8,846	-	-	8,846
180	2023 Replacements	New	213,150	2.075%	4,423	-	-	4,423
181	2023 Technology (G)	Historical	4,000	3.590%	144	-	-	144
182	2023 Float	Historical	-	-	(969)	-	-	(969)
183	<b>FY 2023 Subtotal:</b>		<b>3,831,430</b>		<b>128,038</b>	-	<b>(1,294)</b>	<b>126,744</b>
184	2024 Albeni Falls	Historical	99	4.322%	4	-	-	4
185	2024 Boise	Historical	135	3.187%	4	-	-	4
186	2024 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
187	2024 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
188	2024 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
189	2024 Columbia River Fish Mitigation	Historical	1,170,122	3.658%	42,805	-	-	42,805
190	2024 Cougar	Historical	4,813	3.034%	146	-	-	146
191	2024 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
192	2024 Dworshak	Historical	2,380	4.379%	104	-	-	104
193	2024 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
194	2024 Hills Creek	Historical	154	3.404%	5	-	-	5
195	2024 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
196	2024 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
197	2024 John Day	Historical	8,420	3.600%	303	-	-	303
198	2024 Libby	Historical	489	3.203%	16	-	-	16
199	2024 Little Goose	Historical	5,974	3.622%	216	-	-	216
200	2024 Lookout Dam	Historical	311	3.396%	11	-	-	11
201	2024 Lost Creek	Historical	7	3.748%	-	-	-	-
202	2024 Lower Granite	Historical	12,953	3.923%	508	-	-	508
203	2024 Lower Monument	Historical	4,949	3.788%	188	-	-	188
204	2024 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
205	2024 McNary	Historical	2,573	3.318%	85	-	-	85
206	2024 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
207	2024 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
208	2024 The Dalles	Historical	329	3.200%	11	-	-	11
209	2024 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
210	2024 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
211	2024 Conservation	Historical	183,000	2.260%	4,136	-	(592)	3,543
212	2024 Construction (AS)	Historical	28,200	3.341%	942	-	(32)	910
213	2024 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
214	2024 Fish and Wildlife	Historical	432,000	3.694%	15,956	-	-	15,956
215	2024 Replacements	Historical	426,300	4.150%	17,691	-	-	17,691
216	2024 Replacements	New	213,150	2.075%	4,423	-	-	4,423
217	2024 Technology (G)	Historical	4,000	3.590%	144	-	-	144
218	2024 Float	Historical	-	-	(984)	-	-	(984)
219	<b>FY 2024 Subtotal:</b>		<b>3,939,953</b>		<b>132,570</b>	-	<b>(625)</b>	<b>131,946</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
220	2025 Albeni Falls	Historical	99	4.322%	4	-	-	4
221	2025 Boise	Historical	135	3.187%	4	-	-	4
222	2025 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
223	2025 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
224	2025 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
225	2025 Columbia River Fish Mitigation	Historical	1,141,513	3.637%	41,518	-	-	41,518
226	2025 Cougar	Historical	4,813	3.034%	146	-	-	146
227	2025 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
228	2025 Dworshak	Historical	2,380	4.379%	104	-	-	104
229	2025 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
230	2025 Hills Creek	Historical	154	3.404%	5	-	-	5
231	2025 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
232	2025 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
233	2025 John Day	Historical	8,420	3.600%	303	-	-	303
234	2025 Libby	Historical	489	3.203%	16	-	-	16
235	2025 Little Goose	Historical	5,974	3.622%	216	-	-	216
236	2025 Lookout Dam	Historical	311	3.396%	11	-	-	11
237	2025 Lost Creek	Historical	7	3.748%	-	-	-	-
238	2025 Lower Granite	Historical	12,953	3.923%	508	-	-	508
239	2025 Lower Monument	Historical	4,949	3.788%	188	-	-	188
240	2025 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
241	2025 McNary	Historical	2,573	3.318%	85	-	-	85
242	2025 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
243	2025 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
244	2025 The Dalles	Historical	329	3.200%	11	-	-	11
245	2025 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
246	2025 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
247	2025 Conservation	Historical	113,000	2.523%	2,851	-	(385)	2,465
248	2025 Construction (AS)	Historical	24,000	3.658%	878	-	-	878
249	2025 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
250	2025 Fish and Wildlife	Historical	432,000	3.694%	15,956	-	-	15,956
251	2025 Replacements	Historical	639,449	4.150%	26,537	-	-	26,537
252	2025 Replacements	New	213,150	2.075%	4,423	-	-	4,423
253	2025 Technology (G)	Historical	4,000	3.590%	144	-	-	144
254	2025 Float	Historical	-	-	(977)	-	-	(977)
255	<b>FY 2025 Subtotal:</b>		<b>4,050,295</b>		<b>138,786</b>		<b>(385)</b>	<b>138,401</b>
256	2026 Albeni Falls	Historical	99	4.322%	4	-	-	4
257	2026 Boise	Historical	135	3.187%	4	-	-	4
258	2026 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
259	2026 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
260	2026 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
261	2026 Columbia River Fish Mitigation	Historical	1,115,448	3.617%	40,345	-	-	40,345
262	2026 Cougar	Historical	4,813	3.034%	146	-	-	146
263	2026 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
264	2026 Dworshak	Historical	2,380	4.379%	104	-	-	104
265	2026 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
266	2026 Hills Creek	Historical	154	3.404%	5	-	-	5
267	2026 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
268	2026 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
269	2026 John Day	Historical	8,420	3.600%	303	-	-	303
270	2026 Libby	Historical	489	3.203%	16	-	-	16
271	2026 Little Goose	Historical	5,974	3.622%	216	-	-	216
272	2026 Lookout Dam	Historical	311	3.396%	11	-	-	11
273	2026 Lost Creek	Historical	7	3.748%	-	-	-	-
274	2026 Lower Granite	Historical	12,953	3.923%	508	-	-	508
275	2026 Lower Monument	Historical	4,949	3.788%	188	-	-	188
276	2026 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
277	2026 McNary	Historical	2,573	3.318%	85	-	-	85
278	2026 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
279	2026 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
280	2026 The Dalles	Historical	329	3.200%	11	-	-	11
281	2026 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
282	2026 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
283	2026 Conservation	Historical	49,000	2.697%	1,322	-	(45)	1,277
284	2026 Construction (AS)	Historical	18,000	3.680%	662	-	-	662
285	2026 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
286	2026 Fish and Wildlife	Historical	432,000	3.360%	14,516	-	(580)	13,937
287	2026 Replacements	Historical	852,599	4.150%	35,383	-	-	35,383
288	2026 Replacements	New	213,150	2.075%	4,423	-	-	4,423
289	2026 Float	Historical	-	-	(980)	-	-	(980)
290	<b>FY 2026 Subtotal:</b>		<b>4,163,379</b>		<b>143,127</b>		<b>(624)</b>	<b>142,503</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
291	2027 Albeni Falls	Historical	99	4.322%	4	-	-	4
292	2027 Boise	Historical	135	3.187%	4	-	-	4
293	2027 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
294	2027 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
295	2027 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
296	2027 Columbia River Fish Mitigation	Historical	1,108,692	3.612%	40,041	-	-	40,041
297	2027 Cougar	Historical	4,813	3.034%	146	-	-	146
298	2027 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
299	2027 Dworshak	Historical	2,380	4.379%	104	-	-	104
300	2027 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
301	2027 Hills Creek	Historical	154	3.404%	5	-	-	5
302	2027 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
303	2027 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
304	2027 John Day	Historical	8,420	3.600%	303	-	-	303
305	2027 Libby	Historical	489	3.203%	16	-	-	16
306	2027 Little Goose	Historical	5,974	3.622%	216	-	-	216
307	2027 Lookout Dam	Historical	311	3.396%	11	-	-	11
308	2027 Lost Creek	Historical	7	3.748%	-	-	-	-
309	2027 Lower Granite	Historical	12,953	3.923%	508	-	-	508
310	2027 Lower Monument	Historical	4,949	3.788%	188	-	-	188
311	2027 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
312	2027 McNary	Historical	2,573	3.318%	85	-	-	85
313	2027 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
314	2027 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
315	2027 The Dalles	Historical	329	3.200%	11	-	-	11
316	2027 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
317	2027 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
318	2027 Conservation	Historical	43,000	2.650%	1,140	-	-	1,140
319	2027 Construction (AS)	Historical	18,000	3.680%	662	-	-	662
320	2027 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
321	2027 Fish and Wildlife	Historical	352,000	3.388%	11,927	-	(555)	11,372
322	2027 Replacements	Historical	1,065,749	4.150%	44,229	-	-	44,229
323	2027 Replacements	New	213,150	2.075%	4,423	-	-	4,423
324	2027 Float	Historical	-	-	(1,000)	-	-	(1,000)
325	<b>FY 2027 Subtotal:</b>		<b>4,283,773</b>		<b>148,878</b>	<b>-</b>	<b>(555)</b>	<b>148,323</b>
326	2028 Albeni Falls	Historical	99	4.322%	4	-	-	4
327	2028 Boise	Historical	135	3.187%	4	-	-	4
328	2028 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
329	2028 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
330	2028 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
331	2028 Columbia River Fish Mitigation	Historical	1,091,237	3.597%	39,255	-	-	39,255
332	2028 Cougar	Historical	4,813	3.034%	146	-	-	146
333	2028 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
334	2028 Dworshak	Historical	2,380	4.379%	104	-	-	104
335	2028 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
336	2028 Hills Creek	Historical	154	3.404%	5	-	-	5
337	2028 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
338	2028 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
339	2028 John Day	Historical	8,420	3.600%	303	-	-	303
340	2028 Libby	Historical	489	3.203%	16	-	-	16
341	2028 Little Goose	Historical	5,974	3.622%	216	-	-	216
342	2028 Lookout Dam	Historical	311	3.396%	11	-	-	11
343	2028 Lost Creek	Historical	7	3.748%	-	-	-	-
344	2028 Lower Granite	Historical	12,953	3.923%	508	-	-	508
345	2028 Lower Monument	Historical	4,949	3.788%	188	-	-	188
346	2028 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
347	2028 McNary	Historical	2,573	3.318%	85	-	-	85
348	2028 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
349	2028 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
350	2028 The Dalles	Historical	329	3.200%	11	-	-	11
351	2028 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
352	2028 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
353	2028 Conservation	Historical	25,000	1.249%	312	-	(259)	53
354	2028 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
355	2028 Fish and Wildlife	Historical	297,000	3.553%	10,553	-	-	10,553
356	2028 Replacements	Historical	1,278,899	4.150%	53,074	-	-	53,074
357	2028 Replacements	New	213,150	2.075%	4,423	-	-	4,423
358	2028 Float	Historical	-	-	(1,029)	-	-	(1,029)
359	<b>FY 2028 Subtotal:</b>		<b>4,388,468</b>		<b>154,046</b>	<b>-</b>	<b>(259)</b>	<b>153,787</b>



**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
360	2029 Albeni Falls	Historical	99	4.322%	4	-	-	4
361	2029 Boise	Historical	135	3.187%	4	-	-	4
362	2029 Bonneville Dam	Historical	18,130	3.977%	721	-	-	721
363	2029 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
364	2029 Columbia Basin	Historical	11,930	3.421%	408	-	-	408
365	2029 Columbia River Fish Mitigation	Historical	1,035,230	3.548%	36,735	-	-	36,735
366	2029 Cougar	Historical	4,813	3.034%	146	-	-	146
367	2029 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
368	2029 Dworshak	Historical	2,380	4.379%	104	-	-	104
369	2029 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
370	2029 Hills Creek	Historical	154	3.404%	5	-	-	5
371	2029 Hungry Horse Dam	Historical	1,358	4.065%	55	-	-	55
372	2029 Ice Harbor	Historical	7,488	3.708%	278	-	-	278
373	2029 John Day	Historical	8,420	3.600%	303	-	-	303
374	2029 Libby	Historical	489	3.203%	16	-	-	16
375	2029 Little Goose	Historical	5,974	3.622%	216	-	-	216
376	2029 Lookout Dam	Historical	311	3.396%	11	-	-	11
377	2029 Lost Creek	Historical	7	3.748%	-	-	-	-
378	2029 Lower Granite	Historical	12,953	3.923%	508	-	-	508
379	2029 Lower Monument	Historical	4,949	3.788%	188	-	-	188
380	2029 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
381	2029 McNary	Historical	2,573	3.318%	85	-	-	85
382	2029 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
383	2029 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
384	2029 The Dalles	Historical	329	3.200%	11	-	-	11
385	2029 Yakima Chandler/Kenniwick	Historical	65	3.134%	2	-	-	2
386	2029 Bureau Direct	Historical	690,000	3.211%	22,156	-	-	22,156
387	2029 Corps	Historical	660,300	3.077%	20,314	-	-	20,314
388	2029 Fish and Wildlife	Historical	271,000	3.265%	8,848	-	(496)	8,352
389	2029 Replacements	Historical	1,492,049	4.150%	61,920	-	-	61,920
390	2029 Replacements	New	213,150	2.075%	4,423	-	-	4,423
391	2029 Float	Historical	-	-	(2,528)	-	-	(2,528)
392	<b>FY 2029 Subtotal:</b>		<b>4,494,610</b>		<b>156,855</b>	-	<b>(496)</b>	<b>156,359</b>
393	2030 Albeni Falls	Historical	99	4.322%	4	-	-	4
394	2030 Boise	Historical	118	3.000%	4	-	-	4
395	2030 Bonneville Dam	Historical	15,502	3.888%	603	-	-	603
396	2030 Chief Joseph	Historical	24,769	4.373%	1,083	-	-	1,083
397	2030 Columbia Basin	Historical	8,605	3.024%	260	-	-	260
398	2030 Columbia River Fish Mitigation	Historical	852,051	3.359%	28,619	-	-	28,619
399	2030 Cougar	Historical	4,704	3.000%	141	-	-	141
400	2030 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
401	2030 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
402	2030 Hills Creek	Historical	154	3.404%	5	-	-	5
403	2030 Hungry Horse Dam	Historical	1,297	4.051%	53	-	-	53
404	2030 Ice Harbor	Historical	4,873	3.351%	163	-	-	163
405	2030 John Day	Historical	6,872	3.426%	235	-	-	235
406	2030 Libby	Historical	489	3.203%	16	-	-	16
407	2030 Little Goose	Historical	2,803	2.769%	78	-	-	78
408	2030 Lookout Dam	Historical	311	3.396%	11	-	-	11
409	2030 Lost Creek	Historical	7	3.748%	-	-	-	-
410	2030 Lower Granite	Historical	7,284	3.572%	260	-	-	260
411	2030 Lower Monument	Historical	2,617	3.266%	85	-	-	85
412	2030 Lower Snake Fish and Wildlife	Historical	4,753	3.422%	163	-	-	163
413	2030 McNary	Historical	2,573	3.318%	85	-	-	85
414	2030 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
415	2030 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
416	2030 The Dalles	Historical	329	3.200%	11	-	-	11
417	2030 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
418	2030 Bureau Direct	Historical	519,000	2.992%	15,526	-	(499)	15,027
419	2030 Corps	Historical	660,300	2.632%	17,378	-	(317)	17,061
420	2030 Fish and Wildlife	Historical	215,000	3.623%	7,789	-	-	7,789
421	2030 Replacements	Historical	1,705,199	4.150%	70,766	-	-	70,766
422	2030 Replacements	New	213,150	2.075%	4,423	-	-	4,423
423	2030 Float	Historical	-	-	(2,048)	-	-	(2,048)
424	<b>FY 2030 Subtotal:</b>		<b>4,273,712</b>		<b>146,388</b>	-	<b>(816)</b>	<b>145,572</b>
425	2031 Boise	Historical	118	3.000%	4	-	-	4
426	2031 Bonneville Dam	Historical	11,333	3.725%	422	-	-	422
427	2031 Chief Joseph	Historical	42	3.281%	1	-	-	1
428	2031 Columbia Basin	Historical	7,729	2.885%	223	-	-	223
429	2031 Columbia River Fish Mitigation	Historical	793,486	3.293%	26,127	-	-	26,127
430	2031 Cougar	Historical	4,524	2.947%	133	-	-	133
431	2031 Detroit Lake/Big Cliff	Historical	576	2.913%	17	-	-	17
432	2031 Green Peter/Foster	Historical	638	3.673%	23	-	-	23
433	2031 Hills Creek	Historical	154	3.404%	5	-	-	5
434	2031 Hungry Horse Dam	Historical	518	3.751%	19	-	-	19
435	2031 Ice Harbor	Historical	4,666	3.311%	154	-	-	154
436	2031 John Day	Historical	6,517	3.381%	220	-	-	220

**TABLE 12C:  
Interest Calculation Summary  
October 1, 2018 - September 30, 2021 Cost Evaluation Period  
(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
437	2031 Libby	Historical	449	3.109%	14	-	-	14
438	2031 Little Goose	Historical	2,773	2.753%	76	-	-	76
439	2031 Lookout Dam	Historical	311	3.396%	11	-	-	11
440	2031 Lost Creek	Historical	7	3.748%	-	-	-	-
441	2031 Lower Granite	Historical	6,128	3.444%	211	-	-	211
442	2031 Lower Monument	Historical	2,617	3.266%	85	-	-	85
443	2031 Lower Snake Fish and Wildlife	Historical	3,208	2.964%	95	-	-	95
444	2031 McNary	Historical	2,573	3.318%	85	-	-	85
445	2031 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
446	2031 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
447	2031 The Dalles	Historical	329	3.200%	11	-	-	11
448	2031 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
449	2031 Bureau Direct	Historical	457,000	2.735%	12,499	-	(188)	12,311
450	2031 Corps	Historical	478,814	2.717%	13,011	-	(585)	12,426
451	2031 Fish and Wildlife	Historical	207,000	2.419%	5,008	-	(17)	4,991
452	2031 Replacements	Historical	1,918,348	4.150%	79,611	-	-	79,611
453	2031 Replacements	New	213,150	2.075%	4,423	-	-	4,423
454	2031 Float	Historical	-	-	(2,118)	-	-	(2,118)
455	<b>FY 2031 Subtotal:</b>		<b>4,142,645</b>		<b>141,010</b>		<b>(790)</b>	<b>140,220</b>
456	2032 Boise	Historical	118	3.000%	4	-	-	4
457	2032 Bonneville Dam	Historical	11,333	3.725%	422	-	-	422
458	2032 Chief Joseph	Historical	42	3.281%	1	-	-	1
459	2032 Columbia Basin	Historical	7,729	2.885%	223	-	-	223
460	2032 Columbia River Fish Mitigation	Historical	743,068	3.253%	24,174	-	-	24,174
461	2032 Cougar	Historical	4,524	2.947%	133	-	-	133
462	2032 Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
463	2032 Green Peter/Foster	Historical	253	3.366%	9	-	-	9
464	2032 Hills Creek	Historical	154	3.404%	5	-	-	5
465	2032 Hungry Horse Dam	Historical	506	3.748%	19	-	-	19
466	2032 Ice Harbor	Historical	4,666	3.311%	154	-	-	154
467	2032 John Day	Historical	6,517	3.381%	220	-	-	220
468	2032 Libby	Historical	449	3.109%	14	-	-	14
469	2032 Little Goose	Historical	2,773	2.753%	76	-	-	76
470	2032 Lookout Dam	Historical	311	3.396%	11	-	-	11
471	2032 Lost Creek	Historical	7	3.748%	-	-	-	-
472	2032 Lower Granite	Historical	3,483	3.116%	109	-	-	109
473	2032 Lower Monument	Historical	1,187	2.532%	30	-	-	30
474	2032 Lower Snake Fish and Wildlife	Historical	3,208	2.964%	95	-	-	95
475	2032 McNary	Historical	1,815	3.085%	56	-	-	56
476	2032 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
477	2032 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
478	2032 The Dalles	Historical	329	3.200%	11	-	-	11
479	2032 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
480	2032 Bureau Direct	Historical	375,000	2.577%	9,665	-	(520)	9,145
481	2032 Corps	Historical	401,300	2.531%	10,157	-	(184)	9,973
482	2032 Fish and Wildlife	Historical	65,000	2.281%	1,483	-	-	1,483
483	2032 Replacements	Historical	2,131,498	4.150%	88,457	-	-	88,457
484	2032 Replacements	New	213,150	2.075%	4,423	-	-	4,423
485	2032 Float	Historical	-	-	(2,373)	-	-	(2,373)
486	<b>FY 2032 Subtotal:</b>		<b>3,998,615</b>		<b>138,230</b>		<b>(704)</b>	<b>137,526</b>
487	2033 Boise	Historical	118	3.000%	4	-	-	4
488	2033 Bonneville Dam	Historical	370	2.979%	11	-	-	11
489	2033 Chief Joseph	Historical	38	3.237%	1	-	-	1
490	2033 Columbia Basin	Historical	6,006	2.636%	158	-	-	158
491	2033 Columbia River Fish Mitigation	Historical	520,344	3.041%	15,821	-	-	15,821
492	2033 Cougar	Historical	4,231	2.891%	122	-	-	122
493	2033 Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
494	2033 Green Peter/Foster	Historical	166	3.166%	5	-	-	5
495	2033 Hills Creek	Historical	142	3.375%	5	-	-	5
496	2033 Hungry Horse Dam	Historical	3	3.373%	-	-	-	-
497	2033 Ice Harbor	Historical	3,847	3.217%	124	-	-	124
498	2033 John Day	Historical	6,342	3.370%	214	-	-	214
499	2033 Libby	Historical	298	2.783%	8	-	-	8
500	2033 Little Goose	Historical	2,773	2.753%	76	-	-	76
501	2033 Lookout Dam	Historical	294	3.375%	10	-	-	10
502	2033 Lower Granite	Historical	3,475	3.115%	108	-	-	108
503	2033 Lower Monument	Historical	1,187	2.532%	30	-	-	30
504	2033 Lower Snake Fish and Wildlife	Historical	2,864	2.860%	82	-	-	82
505	2033 McNary	Historical	1,250	2.784%	35	-	-	35
506	2033 Minidoka/Palisades	Historical	19,585	3.242%	635	-	-	635
507	2033 RRP - Green Springs	Historical	3	3.317%	-	-	-	-
508	2033 The Dalles	Historical	329	3.200%	11	-	-	11
509	2033 Yakima Chandler/Kenniwick	Historical	49	2.749%	1	-	-	1
510	2033 Bureau Direct	Historical	288,779	2.360%	6,816	-	(267)	6,549
511	2033 Corps	Historical	349,200	2.411%	8,418	-	-	8,418
512	2033 Fish and Wildlife	Historical	18,000	3.550%	639	-	-	639
513	2033 Replacements	Historical	2,344,648	4.150%	97,303	-	-	97,303
514	2033 Replacements	New	213,150	2.075%	4,423	-	-	4,423
515	2033 Float	Historical	-	-	(2,412)	-	-	(2,412)
516	<b>FY 2033 Subtotal:</b>		<b>3,788,049</b>		<b>132,665</b>		<b>(267)</b>	<b>132,397</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
517	2034 Boise	Historical	118	1.500%	2	-	-	2
518	2034 Bonneville Dam	Historical	268	2.875%	8	-	-	8
519	2034 Chief Joseph	Historical	10	2.876%	-	-	-	-
520	2034 Columbia Basin	Historical	5,995	2.623%	157	-	-	157
521	2034 Columbia River Fish Mitigation	Historical	294,847	2.598%	7,661	-	-	7,661
522	2034 Cougar	Historical	4,092	2.875%	118	-	-	118
523	2034 Detroit Lake/Big Cliff	Historical	558	2.882%	16	-	-	16
524	2034 Green Peter/Foster	Historical	70	2.999%	2	-	-	2
525	2034 Ice Harbor	Historical	558	3.000%	17	-	-	17
526	2034 John Day	Historical	17	2.873%	1	-	-	1
527	2034 Libby	Historical	282	1.375%	4	-	-	4
528	2034 Little Goose	Historical	2,773	1.411%	39	-	-	39
529	2034 Lower Granite	Historical	1,878	3.000%	56	-	-	56
530	2034 Lower Monument	Historical	1,098	2.464%	27	-	-	27
531	2034 Lower Snake Fish and Wildlife	Historical	2,864	2.088%	60	-	-	60
532	2034 McNary	Historical	1,238	2.779%	34	-	-	34
533	2034 Minidoka/Palisades	Historical	341	2.726%	9	-	-	9
534	2034 RRP - Green Springs	Historical	-	2.887%	-	-	-	-
535	2034 The Dalles	Historical	28	1.956%	1	-	-	1
536	2034 Yakima Chandler/Kenniwick	Historical	49	1.374%	1	-	-	1
537	2034 Bureau Direct	Historical	174,130	1.698%	2,957	-	(414)	2,543
538	2034 Corps	Historical	289,129	2.395%	6,924	-	(629)	6,295
539	2034 Replacements	Historical	2,557,798	4.150%	106,149	-	-	106,149
540	2034 Replacements	New	213,150	2.075%	4,423	-	-	4,423
541	2034 Float	Historical	-	-	(2,421)	-	-	(2,421)
542	<b>FY 2034 Subtotal:</b>		<b>3,551,292</b>		<b>126,243</b>	<b>-</b>	<b>(1,043)</b>	<b>125,200</b>
543	2035 Columbia Basin	Historical	2,865	1.187%	34	-	-	34
544	2035 Columbia River Fish Mitigation	Historical	57,719	1.188%	685	-	-	685
545	2035 Cougar	Historical	2	1.214%	-	-	-	-
546	2035 Lower Monument	Historical	942	1.188%	11	-	-	11
547	2035 McNary	Historical	239	1.188%	3	-	-	3
548	2035 Minidoka/Palisades	Historical	127	1.187%	2	-	-	2
549	2035 The Dalles	Historical	10	1.191%	-	-	-	-
550	2035 Bureau Direct	Historical	53,815	1.371%	738	-	(71)	667
551	2035 Corps	Historical	183,399	1.599%	2,932	-	(655)	2,277
552	2035 Replacements	Historical	2,770,948	4.017%	111,320	-	-	111,320
553	2035 Replacements	New	213,150	2.075%	4,423	-	-	4,423
554	2035 Float	Historical	-	-	(2,535)	-	-	(2,535)
555	<b>FY 2035 Subtotal:</b>		<b>3,283,214</b>		<b>117,613</b>	<b>-</b>	<b>(726)</b>	<b>116,886</b>
556	2036 Replacements	Historical	2,807,006	3.796%	106,549	-	-	106,549
557	2036 Replacements	New	213,150	2.075%	4,423	-	-	4,423
558	2036 Float	Historical	-	-	(2,622)	-	-	(2,622)
559	<b>FY 2036 Subtotal:</b>		<b>3,020,156</b>		<b>108,350</b>	<b>-</b>	<b>-</b>	<b>108,350</b>
560	2037 Replacements	Historical	2,541,012	3.734%	94,890	-	-	94,890
561	2037 Replacements	New	213,150	2.075%	4,423	-	-	4,423
562	2037 Float	Historical	-	-	(2,672)	-	-	(2,672)
563	<b>FY 2037 Subtotal:</b>		<b>2,754,162</b>		<b>96,640</b>	<b>-</b>	<b>-</b>	<b>96,640</b>
564	2038 Replacements	Historical	2,245,129	3.624%	81,358	-	-	81,358
565	2038 Replacements	New	213,150	2.075%	4,423	-	-	4,423
566	2038 Float	Historical	-	-	(2,847)	-	-	(2,847)
567	<b>FY 2038 Subtotal:</b>		<b>2,458,279</b>		<b>82,934</b>	<b>-</b>	<b>-</b>	<b>82,934</b>
568	2039 Replacements	Historical	1,888,875	3.427%	64,735	-	-	64,735
569	2039 Replacements	New	213,150	2.075%	4,423	-	-	4,423
570	2039 Float	Historical	-	-	(3,284)	-	-	(3,284)
571	<b>FY 2039 Subtotal:</b>		<b>2,102,025</b>		<b>65,874</b>	<b>-</b>	<b>-</b>	<b>65,874</b>
572	2040 Replacements	Historical	1,444,010	3.151%	45,503	-	-	45,503
573	2040 Replacements	New	213,150	2.075%	4,423	-	-	4,423
574	2040 Float	Historical	-	-	(3,345)	-	-	(3,345)
575	<b>FY 2040 Subtotal:</b>		<b>1,657,160</b>		<b>46,581</b>	<b>-</b>	<b>-</b>	<b>46,581</b>
576	2041 Replacements	Historical	962,064	2.750%	26,461	-	-	26,461
577	2041 Replacements	New	213,150	2.075%	4,423	-	-	4,423
578	2041 Float	Historical	-	-	(3,431)	-	-	(3,431)
579	<b>FY 2041 Subtotal:</b>		<b>1,175,214</b>		<b>27,452</b>	<b>-</b>	<b>-</b>	<b>27,452</b>
580	2042 Replacements	Historical	526,291	2.075%	10,921	-	-	10,921
581	2042 Replacements	New	213,150	2.075%	4,423	-	-	4,423
582	2042 Float	Historical	-	-	(3,480)	-	-	(3,480)
583	<b>FY 2042 Subtotal:</b>		<b>739,441</b>		<b>11,863</b>	<b>-</b>	<b>-</b>	<b>11,863</b>
584	2043 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
585	2043 Replacements	New	213,150	2.075%	4,423	-	-	4,423
586	2043 Float	Historical	-	-	(3,518)	-	-	(3,518)
587	<b>FY 2043 Subtotal:</b>		<b>426,300</b>		<b>5,328</b>	<b>-</b>	<b>-</b>	<b>5,328</b>
588	2044 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
589	2044 Replacements	New	213,150	2.075%	4,423	-	-	4,423
590	2044 Float	Historical	-	-	(3,015)	-	-	(3,015)
591	<b>FY 2044 Subtotal:</b>		<b>426,300</b>		<b>5,831</b>	<b>-</b>	<b>-</b>	<b>5,831</b>
592	2045 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
593	2045 Replacements	New	213,150	2.075%	4,423	-	-	4,423
594	2045 Float	Historical	-	-	(1,506)	-	-	(1,506)
595	<b>FY 2045 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
596	2046 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
597	2046 Replacements	New	213,150	2.075%	4,423	-	-	4,423
598	2046 Float	Historical	-	-	(1,506)	-	-	(1,506)
599	<b>FY 2046 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
600	2047 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
601	2047 Replacements	New	213,150	2.075%	4,423	-	-	4,423
602	2047 Float	Historical	-	-	(1,506)	-	-	(1,506)
603	<b>FY 2047 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
604	2048 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
605	2048 Replacements	New	213,150	2.075%	4,423	-	-	4,423
606	2048 Float	Historical	-	-	(1,506)	-	-	(1,506)
607	<b>FY 2048 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
608	2049 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
609	2049 Replacements	New	213,150	2.075%	4,423	-	-	4,423
610	2049 Float	Historical	-	-	(1,506)	-	-	(1,506)
611	<b>FY 2049 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
612	2050 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
613	2050 Replacements	New	213,150	2.075%	4,423	-	-	4,423
614	2050 Float	Historical	-	-	(1,506)	-	-	(1,506)
615	<b>FY 2050 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
616	2051 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
617	2051 Replacements	New	213,150	2.075%	4,423	-	-	4,423
618	2051 Float	Historical	-	-	(1,506)	-	-	(1,506)
619	<b>FY 2051 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
620	2052 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
621	2052 Replacements	New	213,150	2.075%	4,423	-	-	4,423
622	2052 Float	Historical	-	-	(1,506)	-	-	(1,506)
623	<b>FY 2052 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
624	2053 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
625	2053 Replacements	New	213,150	2.075%	4,423	-	-	4,423
626	2053 Float	Historical	-	-	(1,506)	-	-	(1,506)
627	<b>FY 2053 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
628	2054 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
629	2054 Replacements	New	213,150	2.075%	4,423	-	-	4,423
630	2054 Float	Historical	-	-	(1,506)	-	-	(1,506)
631	<b>FY 2054 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
632	2055 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
633	2055 Replacements	New	213,150	2.075%	4,423	-	-	4,423
634	2055 Float	Historical	-	-	(1,506)	-	-	(1,506)
635	<b>FY 2055 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
636	2056 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
637	2056 Replacements	New	213,150	2.075%	4,423	-	-	4,423
638	2056 Float	Historical	-	-	(1,506)	-	-	(1,506)
639	<b>FY 2056 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
640	2057 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
641	2057 Replacements	New	213,150	2.075%	4,423	-	-	4,423
642	2057 Float	Historical	-	-	(1,506)	-	-	(1,506)
643	<b>FY 2057 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
644	2058 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
645	2058 Replacements	New	213,150	2.075%	4,423	-	-	4,423
646	2058 Float	Historical	-	-	(1,506)	-	-	(1,506)
647	<b>FY 2058 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
648	2059 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
649	2059 Replacements	New	213,150	2.075%	4,423	-	-	4,423
650	2059 Float	Historical	-	-	(1,506)	-	-	(1,506)
651	<b>FY 2059 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
652	2060 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
653	2060 Replacements	New	213,150	2.075%	4,423	-	-	4,423
654	2060 Float	Historical	-	-	(1,506)	-	-	(1,506)
655	<b>FY 2060 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
656	2061 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
657	2061 Replacements	New	213,150	2.075%	4,423	-	-	4,423
658	2061 Float	Historical	-	-	(1,506)	-	-	(1,506)
659	<b>FY 2061 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
660	2062 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
661	2062 Replacements	New	213,150	2.075%	4,423	-	-	4,423
662	2062 Float	Historical	-	-	(1,506)	-	-	(1,506)
663	<b>FY 2062 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
664	2063 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
665	2063 Replacements	New	213,150	2.075%	4,423	-	-	4,423
666	2063 Float	Historical	-	-	(1,506)	-	-	(1,506)
667	<b>FY 2063 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
668	2064 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
669	2064 Replacements	New	213,150	2.075%	4,423	-	-	4,423
670	2064 Float	Historical	-	-	(1,506)	-	-	(1,506)
671	<b>FY 2064 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>
672	2065 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
673	2065 Replacements	New	213,150	2.075%	4,423	-	-	4,423
674	2065 Float	Historical	-	-	(1,506)	-	-	(1,506)
675	<b>FY 2065 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	-	-	<b>7,340</b>

**TABLE 12C:**  
**Interest Calculation Summary**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	D	E	F	G	H	I	J
Fiscal Year	Project	Type	Current Principal	Rate	Interest	Premium	Net Interest Accrual	Total
676	2066 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
677	2066 Replacements	New	213,150	2.075%	4,423	-	-	4,423
678	2066 Float	Historical	-	-	(1,506)	-	-	(1,506)
679	<b>FY 2066 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
680	2067 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
681	2067 Replacements	New	213,150	2.075%	4,423	-	-	4,423
682	2067 Float	Historical	-	-	(1,506)	-	-	(1,506)
683	<b>FY 2067 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
684	2068 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
685	2068 Replacements	New	213,150	2.075%	4,423	-	-	4,423
686	2068 Float	Historical	-	-	(1,506)	-	-	(1,506)
687	<b>FY 2068 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
688	2069 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
689	2069 Replacements	New	213,150	2.075%	4,423	-	-	4,423
690	2069 Float	Historical	-	-	(1,506)	-	-	(1,506)
691	<b>FY 2069 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
692	2070 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
693	2070 Replacements	New	213,150	2.075%	4,423	-	-	4,423
694	2070 Float	Historical	-	-	(1,506)	-	-	(1,506)
695	<b>FY 2070 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
696	2071 Replacements	Historical	213,150	2.075%	4,423	-	-	4,423
697	2071 Replacements	New	213,150	2.075%	4,423	-	-	4,423
698	2071 Float	Historical	-	-	(1,506)	-	-	(1,506)
699	<b>FY 2071 Subtotal:</b>		<b>426,300</b>		<b>7,340</b>	<b>-</b>	<b>-</b>	<b>7,340</b>
700	<b>Grand</b>		<b>\$93,403,658</b>		<b>\$2,917,331</b>	<b>-</b>	<b>(\$10,724)</b>	<b>\$2,906,607</b>

**TABLE 12D**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount
1	2019	Construction (AS)	-	11/30/2012	11/30/2018	5,250	5,250	1.109%							5,250
2	2019	Fish and Wildlife	-	8/31/2010	8/31/2019	20,000	20,000	2.646%							20,000
3	2019	Bureau Direct	-	12/31/2018	9/30/2019	13,000	13,000	2.568%							13,000
4	2019	Bureau Direct	-	12/31/2018	9/30/2019	14,000	14,000	2.568%							14,000
5	2019	Bureau Direct	-	12/31/2018	9/30/2019	21,000	21,000	2.568%							21,000
6	2019	Bureau Direct	-	12/31/2018	9/30/2019	38,000	38,000	2.568%							38,000
7	2019	Fish and Wildlife	-	12/31/2018	9/30/2019	26,000	26,000	2.568%							26,000
8	2019	Bureau Direct	-	1/31/2019	9/30/2019	10,000	10,000	2.521%							10,000
9	2019	Bureau Direct	-	10/31/2018	9/30/2019	24,000	24,000	2.653%							24,000
10	2019	Bureau Direct	-	9/30/2009	9/30/2019	25,000	25,000	3.699%							25,000
11	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	366,395	4.500%							145,728
12	2019	John Day	Corps of Engineers	9/30/2006	9/30/2056	601	601	4.500%							601
13	2019	Lower Monument	Corps of Engineers	9/30/2006	9/30/2056	285	285	4.500%							285
14	2019	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2006	9/30/2056	379	379	4.500%							379
15	2019	The Dalles	Corps of Engineers	9/30/2006	9/30/2056	2,030	2,030	4.500%							2,030
16	2019	McNary	Corps of Engineers	9/30/2006	9/30/2056	4,080	4,080	4.500%							4,080
17	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2007	9/30/2057	53,525	14,765	5.000%							14,765
18	2019	Boise	Bureau of Reclamation	9/30/2008	9/30/2058	64	64	4.875%							64
19	2019	Bonneville Dam	Corps of Engineers	9/30/2008	9/30/2058	14,609	14,609	4.875%							14,609
20	2019	Columbia River Fish Mitigation	Corps of Engineers	9/30/2008	9/30/2058	36,554	36,554	4.875%							36,554
21	2019	Dworshak	Corps of Engineers	9/30/2008	9/30/2058	10	10	4.875%							10
22	2019	Hungry Horse Dam	Bureau of Reclamation	9/30/2008	9/30/2058	76	76	4.875%							76
23	2019	Ice Harbor	Corps of Engineers	9/30/2008	9/30/2058	14	14	4.875%							14
24	2019	Libby	Corps of Engineers	9/30/2008	9/30/2058	1,567	1,567	4.875%							1,567
25	2019	Little Goose	Corps of Engineers	9/30/2008	9/30/2058	13	13	4.875%							13
26	2019	Lower Granite	Corps of Engineers	9/30/2008	9/30/2058	24	24	4.875%							24
27	2019	Lower Monument	Corps of Engineers	9/30/2008	9/30/2058	9	9	4.875%							9
28	2019	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2008	9/30/2058	74	74	4.875%							74
29	2019	McNary	Corps of Engineers	9/30/2008	9/30/2058	215	215	4.875%							215
30	2019	The Dalles	Corps of Engineers	9/30/2008	9/30/2058	1,651	1,651	4.875%							1,651
31	2019	Chief Joseph	Corps of Engineers	9/30/2008	9/30/2058	3,500	3,500	4.875%							3,500
32	2019	Columbia Basin	Bureau of Reclamation	9/30/2008	9/30/2058	835	835	4.875%							835
33		<b>FY 2019 Subtotal:</b>	-	-	-	<b>682,760</b>	<b>644,000</b>	-							<b>423,334</b>
34	2020	Construction (AS)	-	10/31/2013	10/31/2019	4,200	4,200	2.039%							4,200
35	2020	Construction (AS)	-	10/31/2013	10/31/2019	5,000	5,000	2.039%							5,000
36	2020	Bureau Direct	-	10/31/2009	10/31/2019	20,000	20,000	3.842%							20,000
37	2020	Bureau Direct	-	11/30/2009	11/30/2019	7,000	7,000	3.637%							7,000
38	2020	Bureau Direct	-	12/31/2009	12/31/2019	13,000	13,000	4.194%							13,000
39	2020	Construction (AS)	-	1/31/2014	1/31/2020	1,750	1,750	2.183%							1,750
40	2020	Construction (AS)	-	1/31/2014	1/31/2020	2,000	2,000	2.183%							2,000
41	2020	Bureau Direct	-	3/31/2010	3/31/2020	30,000	30,000	4.083%							30,000
42	2020	Construction (AS)	-	4/30/2014	3/31/2020	1,400	1,400	2.455%							1,400
43	2020	Construction (AS)	-	4/30/2014	3/31/2020	2,000	2,000	2.455%							2,000
44	2020	Construction (AS)	-	5/31/2014	4/30/2020	700	700	2.497%							700
45	2020	Construction (AS)	-	7/31/2014	7/31/2020	1,050	1,050	2.497%							1,050
46	2020	Bureau Direct	-	11/20/2013	9/30/2020	51,000	51,000	2.473%							51,000
47	2020	Corps	-	7/31/2020	9/30/2020	24,000	33,900	3.590%							33,900
48	2020	Bureau Direct	-	6/30/2009	6/30/2039	25,000	25,000	5.192%							72
49	2020	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	220,666	4.500%							13
50		<b>FY 2020 Subtotal:</b>	-	-	-	<b>554,495</b>	<b>418,666</b>	-							<b>173,072</b>
51	2021	Construction (AS)	-	11/30/2014	11/30/2020	2,100	2,100	1.809%							2,100
52	2021	Construction (AS)	-	12/31/2014	12/31/2020	1,050	1,050	1.922%							1,050
53	2021	Technology (G)	-	1/31/2015	1/31/2021	35,000	35,000	1.469%							35,000
54	2021	Bureau Direct	-	1/31/2009	1/31/2021	25,000	25,000	3.999%							25,000
55	2021	Construction (AS)	-	2/28/2015	2/28/2021	1,750	1,750	1.761%							1,750
56	2021	Construction (AS)	-	5/31/2015	5/31/2021	2,100	2,100	1.898%							2,100
57	2021	Conservation	-	5/31/2015	5/31/2021	5,000	5,000	1.898%							5,000
58	2021	Conservation	-	7/31/2015	7/31/2021	14,000	14,000	2.067%							14,000
59	2021	Bureau Direct	-	11/20/2013	9/30/2021	50,000	50,000	2.812%							50,000
60	2021	Bureau Direct	-	9/30/2010	9/30/2021	22,000	22,000	2.883%							22,000

**TABLE 12D**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount
61	2021	Bureau Direct	-	7/31/2021	9/30/2021	42,000	62,000	3.760%					62,000		
62	2021	Corps	-	7/31/2021	9/30/2021	93,000	11,000	3.760%					11,000		
63	2021	Corps	-	7/31/2021	9/30/2021	93,000	121,000	3.760%					121,000		
64	2021	Bureau Direct	-	8/31/2021	9/30/2021	42,000	62,000	3.760%					62,000		
65	2021	Corps	-	8/31/2021	9/30/2021	93,000	104,000	3.760%					104,000		
66	2021	Bureau Direct	-	6/30/2009	6/30/2039	25,000	24,928	5.192%					65	10	
67	2021	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	220,666	4.500%							
68		<b>FY 2021 Subtotal:</b>	-	-	-	<b>912,395</b>	<b>763,594</b>	-					<b>518,065</b>	<b>10</b>	
69	2022	Construction (AS)	-	10/31/2015	10/31/2021	2,800	2,800	1.942%					2,800		
70	2022	Conservation	-	12/31/2013	12/31/2021	6,000	6,000	3.142%					6,000		
71	2022	Construction (AS)	-	2/29/2016	2/28/2022	3,000	3,000	2.476%					3,000		
72	2022	Technology (G)	-	10/31/2015	7/31/2022	6,000	6,000	2.497%					6,000		
73	2022	Conservation	-	8/31/2015	8/31/2022	6,000	6,000	2.233%					6,000		
74	2022	Conservation	-	1/31/2018	9/30/2022	9,000	9,000	2.513%					9,000		
75	2022	Conservation	-	1/31/2018	9/30/2022	20,000	20,000	2.513%					20,000		
76	2022	Bureau Direct	-	11/20/2013	9/30/2022	19,000	19,000	3.125%					19,000		
77	2022	Fish and Wildlife	-	11/20/2013	9/30/2022	31,000	31,000	3.125%					31,000		
78	2022	Conservation	-	9/30/2015	9/30/2022	4,000	4,000	2.062%					4,000		
79	2022	Technology (G)	-	9/30/2021	9/30/2022	11,000	26,000	3.740%					26,000		
80	2022	Fish and Wildlife	-	6/30/2009	6/30/2024	20,000	20,000	4.556%					20,000	396	
81	2022	Bureau Direct	-	6/22/2011	6/30/2036	30,000	30,000	4.629%					30,000	2,386	
82	2022	Bureau Direct	-	6/22/2011	6/30/2038	30,000	30,000	4.700%					30,000	2,731	
83	2022	Bureau Direct	-	1/31/2011	1/31/2039	35,000	35,000	5.040%					35,000	4,640	
84	2022	Bureau Direct	-	6/30/2009	6/30/2039	25,000	24,863	5.192%					24,863	3,840	
85	2022	Bureau Direct	-	2/28/2011	2/28/2040	50,000	50,000	4.995%					50,000	6,385	
86	2022	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	220,666	4.500%					1,439		
87		<b>FY 2022 Subtotal:</b>	-	-	-	<b>674,195</b>	<b>543,330</b>	-					<b>324,102</b>	<b>20,379</b>	
88	2023	Conservation	-	1/31/2011	1/31/2023	40,000	40,000	4.046%					40,000		
89	2023	Conservation	-	4/30/2011	4/30/2023	35,000	35,000	3.932%					35,000		
90	2023	Conservation	-	11/20/2013	9/30/2023	27,000	27,000	3.375%					27,000		
91	2023	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	219,227	4.500%					2,627		
92		<b>FY 2023 Subtotal:</b>	-	-	-	<b>468,395</b>	<b>321,227</b>	-					<b>104,627</b>		
93	2024	Construction (AS)	-	9/28/2018	12/31/2023	4,200	4,200	3.064%					4,200		
94	2024	Conservation	-	12/31/2013	12/31/2023	55,000	55,000	2.530%					55,000		
95	2024	Conservation	-	5/31/2014	4/30/2024	15,000	15,000	2.497%					15,000		
96	2024	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	216,601	4.500%					28,608		
97		<b>FY 2024 Subtotal:</b>	-	-	-	<b>440,595</b>	<b>290,801</b>	-					<b>102,808</b>		
98	2025	Conservation	-	6/30/2014	10/31/2024	5,000	5,000	2.497%					5,000		
99	2025	Conservation	-	10/31/2014	12/31/2024	10,000	10,000	2.530%					10,000		
100	2025	Conservation	-	5/31/2014	4/30/2025	3,000	3,000	2.497%					3,000		
101	2025	Conservation	-	4/30/2014	6/30/2025	30,000	30,000	2.530%					30,000		
102	2025	Conservation	-	7/31/2014	7/31/2025	12,000	12,000	2.497%					12,000		
103	2025	Conservation	-	8/31/2014	9/30/2025	4,000	4,000	2.455%					4,000		
104	2025	Construction (AS)	-	9/30/2020	9/30/2025	3,850	6,000	3.590%					6,000		
105	2025	Technology (G)	-	9/30/2020	9/30/2025	2,000	4,000	3.590%					4,000		
106	2025	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	187,992	4.500%					26,065		
107		<b>FY 2025 Subtotal:</b>	-	-	-	<b>436,245</b>	<b>261,992</b>	-					<b>100,065</b>		
108	2026	Conservation	-	10/31/2013	10/31/2025	34,000	1,000	3.568%					1,000		
109	2026	Conservation	-	1/31/2014	1/31/2026	5,000	5,000	3.621%					5,000		
110	2026	Fish and Wildlife	-	1/31/2011	1/31/2026	50,000	50,000	4.440%					50,000		
111	2026	Fish and Wildlife	-	2/28/2011	2/28/2026	15,000	15,000	4.398%					15,000		
112	2026	Fish and Wildlife	-	6/22/2011	6/30/2026	15,000	15,000	4.205%					15,000		
113	2026	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	161,927	4.500%					6,756		
114		<b>FY 2026 Subtotal:</b>	-	-	-	<b>485,395</b>	<b>247,927</b>	-					<b>92,756</b>		
115	2027	Conservation	-	12/31/2014	12/31/2023	7,000	7,000	2.403%	Global	12/31/2023	12/31/2026	3.680%	7,000		
116	2027	Conservation	-	4/30/2015	4/30/2024	5,000	5,000	2.269%	Global	4/30/2024	4/30/2027	3.680%	5,000		
117	2027	Fish and Wildlife	-	10/31/2013	12/31/2026	28,000	28,000	3.717%					28,000		
118	2027	Conservation	-	11/30/2014	3/31/2027	6,000	6,000	2.455%					6,000		
119	2027	Fish and Wildlife	-	5/31/2014	4/30/2027	11,000	11,000	2.497%					11,000		
120	2027	Fish and Wildlife	-	11/30/2013	5/31/2027	5,000	5,000	2.544%					5,000		

**TABLE 12D**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount
121	2027	Fish and Wildlife	-	10/31/2013	5/31/2027	11,000	11,000	3.762%							11,000
122	2027	Construction (AS)	-	9/30/2021	9/30/2027	7,700	18,000	3.680%							18,000
123	2027	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	155,171	4.500%							17,455
124		<b>FY 2027 Subtotal:</b>	-	-	-	<b>447,095</b>	<b>246,171</b>	-							<b>108,455</b>
125	2028	Fish and Wildlife	-	11/20/2013	9/30/2023	23,000	23,000	3.375%		Global	9/30/2023	9/30/2028	3.610%		23,000
126	2028	Conservation	-	10/31/2015	10/31/2027	25,000	25,000	2.497%							25,000
127	2028	Fish and Wildlife	-	3/31/2015	3/31/2028	3,000	3,000	2.511%							3,000
128	2028	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	137,716	4.500%							56,007
129		<b>FY 2028 Subtotal:</b>	-	-	-	<b>417,395</b>	<b>188,716</b>	-							<b>107,007</b>
130	2029	Bureau Direct	-	4/30/2010	4/30/2020	18,000	18,000	3.973%		Global	4/30/2020	4/30/2029	3.720%		18,000
131	2029	Bureau Direct	-	5/31/2010	5/31/2020	15,000	15,000	3.574%		Global	5/31/2020	5/31/2029	3.720%		15,000
132	2029	Bureau Direct	-	6/30/2010	6/30/2020	10,000	10,000	3.243%		Global	6/30/2020	6/30/2029	3.720%		10,000
133	2029	Bureau Direct	-	6/30/2010	6/30/2020	30,000	30,000	3.243%		Global	6/30/2020	6/30/2029	3.720%		30,000
134	2029	Bureau Direct	-	7/31/2010	7/31/2020	17,000	17,000	3.118%		Global	7/31/2020	7/31/2029	3.720%		17,000
135	2029	Bureau Direct	-	4/30/2009	4/30/2023	25,000	25,000	4.391%		Global	4/30/2023	4/30/2029	3.660%		25,000
136	2029	Fish and Wildlife	-	10/31/2013	10/31/2028	22,000	22,000	3.880%							22,000
137	2029	Fish and Wildlife	-	1/31/2014	1/31/2029	7,000	7,000	3.896%							7,000
138	2029	Fish and Wildlife	-	10/31/2014	1/31/2029	15,000	15,000	2.497%							15,000
139	2029	Fish and Wildlife	-	4/30/2014	2/28/2029	7,000	7,000	2.476%							7,000
140	2029	Fish and Wildlife	-	8/31/2014	7/31/2029	5,000	5,000	2.497%							5,000
141	2029	Bureau Direct	-	12/31/2018	9/30/2029	13,000	13,000	3.100%							13,000
142	2029	Bureau Direct	-	12/31/2018	9/30/2029	43,000	43,000	3.100%							43,000
143	2029	Boise	Bureau of Reclamation	9/30/2006	9/30/2056	15	15	4.500%							15
144	2029	Bonneville Dam	Corps of Engineers	9/30/2006	9/30/2056	2,628	2,628	4.500%							2,628
145	2029	Columbia Basin	Bureau of Reclamation	9/30/2006	9/30/2056	1,987	1,987	4.500%							1,987
146	2029	Columbia River Fish Mitigation	Corps of Engineers	9/30/2006	9/30/2056	366,395	81,709	4.500%							81,709
147	2029	Cougar	Corps of Engineers	9/30/2006	9/30/2056	109	109	4.500%							109
148	2029	Dworshak	Corps of Engineers	9/30/2006	9/30/2056	73	73	4.500%							73
149	2029	Boise	Bureau of Reclamation	9/30/2009	9/30/2059	2	2	4.375%							2
150	2029	Columbia Basin	Bureau of Reclamation	9/30/2009	9/30/2059	1,338	1,338	4.375%							1,338
151	2029	Columbia River Fish Mitigation	Corps of Engineers	9/30/2009	9/30/2059	103,203	103,203	4.375%							101,470
152	2029	Dworshak	Corps of Engineers	9/30/2009	9/30/2059	2,307	2,307	4.375%							2,307
153	2029	Hungry Horse Dam	Bureau of Reclamation	9/30/2009	9/30/2059	60	60	4.375%							60
154	2029	Ice Harbor	Corps of Engineers	9/30/2009	9/30/2059	2,615	2,615	4.375%							2,615
155	2029	John Day	Corps of Engineers	9/30/2009	9/30/2059	1,548	1,548	4.375%							1,548
156	2029	Little Goose	Corps of Engineers	9/30/2009	9/30/2059	3,171	3,171	4.375%							3,171
157	2029	Lower Granite	Corps of Engineers	9/30/2009	9/30/2059	5,669	5,669	4.375%							5,669
158	2029	Lower Monument	Corps of Engineers	9/30/2009	9/30/2059	2,332	2,332	4.375%							2,332
159	2029	Yakima Chandler/Kenniwick	Bureau of Reclamation	9/30/2009	9/30/2059	15	15	4.375%							15
160		<b>FY 2029 Subtotal:</b>	-	-	-	<b>720,468</b>	<b>435,781</b>	-							<b>434,048</b>
161	2030	Fish and Wildlife	-	11/30/2014	3/31/2030	8,000	8,000	2.455%							8,000
162	2030	Corps	-	5/31/2016	5/31/2030	15,000	15,000	2.599%							15,000
163	2030	Bureau Direct	-	7/31/2016	7/31/2030	12,000	12,000	2.145%							12,000
164	2030	Corps	-	7/31/2016	7/31/2030	25,000	25,000	2.145%							25,000
165	2030	Bureau Direct	-	10/31/2010	10/31/2034	20,000	20,000	4.211%							20,000
166	2030	Bureau Direct	-	8/12/2011	8/31/2037	30,000	30,000	4.208%							30,000
167	2030	Corps	-	8/31/2021	8/31/2051	93,000	28,000	4.150%							28,000
168	2030	Corps	-	9/30/2021	9/30/2051	187,000	138,000	4.150%							113,486
169	2030	Albeni Falls	Corps of Engineers	9/30/2009	9/30/2059	57	57	4.375%							57
170	2030	Bonneville Dam	Corps of Engineers	9/30/2009	9/30/2059	2,744	2,744	4.375%							2,744
171	2030	Chief Joseph	Corps of Engineers	9/30/2009	9/30/2059	24,727	24,727	4.375%							24,727
172	2030	Columbia River Fish Mitigation	Corps of Engineers	9/30/2009	9/30/2059	103,203	1,733	4.375%							1,733
173	2030	Cougar	Corps of Engineers	9/30/2009	9/30/2059	121	121	4.375%							121
174	2030	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2009	9/30/2059	1,540	1,540	4.375%							1,540
175	2030	Little Goose	Corps of Engineers	9/30/2010	9/30/2060	30	30	4.250%							30
176	2030	Lower Granite	Corps of Engineers	9/30/2010	9/30/2060	1,156	1,156	4.250%							1,156
177	2030	Albeni Falls	Corps of Engineers	9/30/2010	9/30/2060	42	42	4.250%							42
178	2030	Bonneville Dam	Corps of Engineers	9/30/2010	9/30/2060	1,425	1,425	4.250%							1,425
179	2030	Columbia Basin	Bureau of Reclamation	9/30/2010	9/30/2060	877	877	4.250%							877
180	2030	Columbia River Fish Mitigation	Corps of Engineers	9/30/2010	9/30/2060	56,832	56,832	4.250%							56,832



**TABLE 12D**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount	
181	2030	Cougar	Corps of Engineers	9/30/2010	9/30/2060	59	59	4.250%							59	
182	2030	Hungry Horse Dam	Bureau of Reclamation	9/30/2010	9/30/2060	779	779	4.250%							779	
183	2030	Ice Harbor	Corps of Engineers	9/30/2010	9/30/2060	207	207	4.250%							207	
184	2030	John Day	Corps of Engineers	9/30/2010	9/30/2060	356	356	4.250%							356	
185	2030	Libby	Corps of Engineers	9/30/2010	9/30/2060	40	40	4.250%							40	
186	2030	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2010	9/30/2060	6	6	4.250%							6	
187		<b>FY 2030 Subtotal:</b>	-	-	-	<b>584,200</b>	<b>368,730</b>	-							<b>344,217</b>	<b>1,465</b>
188	2031	Fish and Wildlife	-	2/29/2016	2/28/2031	4,000	4,000	2.476%							4,000	
189	2031	Fish and Wildlife	-	10/31/2015	2/28/2031	4,000	4,000	2.476%							4,000	
190	2031	Fish and Wildlife	-	10/31/2015	3/31/2031	5,000	5,000	2.455%							5,000	
191	2031	Corps	-	4/30/2016	4/30/2031	53,000	53,000	2.661%							53,000	
192	2031	Bureau Direct	-	4/30/2016	4/30/2031	17,000	17,000	2.661%							17,000	
193	2031	Fish and Wildlife	-	9/30/2021	9/30/2036	50,000	129,000	3.910%							129,000	
194	2031	Bureau Direct	-	9/30/2021	9/30/2042	83,000	65,000	4.000%							65,000	
195	2031	Corps	-	9/30/2021	9/30/2051	187,000	24,514	4.150%							24,514	
196	2031	Hungry Horse Dam	Bureau of Reclamation	9/30/2014	9/30/2064	12	12	3.875%							12	
197	2031	Columbia River Fish Mitigation	Corps of Engineers	9/30/2014	9/30/2064	110,071	110,071	3.875%							50,418	
198	2031	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2014	9/30/2064	18	18	3.875%							18	
199	2031	Green Peter/Foster	Corps of Engineers	9/30/2014	9/30/2064	385	385	3.875%							385	
200	2031	Lower Granite	Corps of Engineers	9/30/2014	9/30/2064	2,644	2,644	3.875%							2,644	
201	2031	Lower Monument	Corps of Engineers	9/30/2014	9/30/2064	1,430	1,430	3.875%							1,430	
202	2031	McNary	Corps of Engineers	9/30/2014	9/30/2064	759	759	3.875%							759	
203		<b>FY 2031 Subtotal:</b>	-	-	-	<b>518,319</b>	<b>416,833</b>	-							<b>357,180</b>	
204	2032	Bureau Direct	-	9/30/2014	5/31/2032	16,000	16,000	2.544%							16,000	
205	2032	Bureau Direct	-	9/30/2014	5/31/2032	10,000	10,000	2.544%							10,000	
206	2032	Fish and Wildlife	-	9/30/2020	9/30/2035	38,000	47,000	3.590%							47,000	
207	2032	Bureau Direct	-	7/31/2020	7/31/2050	44,000	40,000	3.590%							40,000	
208	2032	Corps	-	7/31/2020	7/31/2050	24,000	9,100	3.590%							9,100	
209	2032	Bureau Direct	-	8/31/2020	8/31/2050	44,000	40,000	3.590%							20,221	
210	2032	Corps	-	8/31/2020	8/31/2050	24,000	43,000	3.590%							43,000	
211	2032	Hungry Horse Dam	Bureau of Reclamation	9/30/2011	9/30/2061	503	503	3.750%							503	
212	2032	Bonneville Dam	Corps of Engineers	9/30/2011	9/30/2061	10,962	10,962	3.750%							10,962	
213	2032	Chief Joseph	Corps of Engineers	9/30/2011	9/30/2061	4	4	3.750%							4	
214	2032	Columbia Basin	Bureau of Reclamation	9/30/2011	9/30/2061	1,723	1,723	3.750%							1,723	
215	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2011	9/30/2061	106,014	106,014	3.750%							106,014	
216	2032	Cougar	Corps of Engineers	9/30/2011	9/30/2061	282	282	3.750%							282	
217	2032	Green Peter/Foster	Corps of Engineers	9/30/2011	9/30/2061	87	87	3.750%							87	
218	2032	Hills Creek	Corps of Engineers	9/30/2011	9/30/2061	12	12	3.750%							12	
219	2032	Ice Harbor	Corps of Engineers	9/30/2011	9/30/2061	819	819	3.750%							819	
220	2032	John Day	Corps of Engineers	9/30/2011	9/30/2061	175	175	3.750%							175	
221	2032	Libby	Corps of Engineers	9/30/2011	9/30/2061	152	152	3.750%							152	
222	2032	Lookout Dam	Corps of Engineers	9/30/2011	9/30/2061	17	17	3.750%							17	
223	2032	Lost Creek	Corps of Engineers	9/30/2011	9/30/2061	7	7	3.750%							7	
224	2032	Lower Granite	Corps of Engineers	9/30/2011	9/30/2061	8	8	3.750%							8	
225	2032	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2011	9/30/2061	122	122	3.750%							122	
226	2032	McNary	Corps of Engineers	9/30/2011	9/30/2061	565	565	3.750%							565	
227	2032	Cougar	Corps of Engineers	9/30/2014	9/30/2064	12	12	3.875%							12	
228	2032	Bonneville Dam	Corps of Engineers	9/30/2014	9/30/2064			3.875%								
229	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2014	9/30/2064	110,071	59,653	3.875%							59,653	
230	2032	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2014	9/30/2064	222	222	3.875%							222	
231	2032	Columbia River Fish Mitigation	Corps of Engineers	9/30/2021	9/30/2071	36,136	57,057	3.620%							57,057	
232		<b>FY 2032 Subtotal:</b>	-	-	-	<b>467,891</b>	<b>443,494</b>	-							<b>423,715</b>	
233	2033	Bureau Direct	-	9/30/2014	6/30/2033	11,000	11,000	2.530%							11,000	
234	2033	Bureau Direct	-	9/30/2014	6/30/2033	12,000	12,000	2.530%							12,000	
235	2033	Bureau Direct	-	9/30/2014	7/31/2033	15,000	15,000	2.497%							15,000	
236	2033	Bureau Direct	-	9/30/2015	9/30/2033	10,000	10,000	3.134%							10,000	
237	2033	Corps	-	9/30/2015	9/30/2033	4,000	4,000	3.134%							4,000	
238	2033	Fish and Wildlife	-	9/28/2018	9/30/2033	18,000	18,000	3.550%							18,000	
239	2033	Bureau Direct	-	8/31/2020	8/31/2050	44,000	19,779	3.590%							19,779	
240	2033	Bureau Direct	-	9/30/2020	9/30/2050	45,000	42,000	3.590%							42,000	

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**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

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Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount
241	2033	Corps	-	9/30/2020	9/30/2050	26,000	45,000	3.590%					45,000		
242	2033	Cougar	Corps of Engineers	9/30/2012	9/30/2062	139	139	3.375%					139		
243	2033	Hungry Horse Dam	Bureau of Reclamation	9/30/2012	9/30/2062	3	3	3.375%					3		
244	2033	Minidoka/Palisades	Bureau of Reclamation	9/30/2012	9/30/2062	7	7	3.375%					7		
245	2033	Green Peter/Foster	Corps of Engineers	9/30/2012	9/30/2062	28	28	3.375%					28		
246	2033	Chief Joseph	Corps of Engineers	9/30/2012	9/30/2062	28	28	3.375%					28		
247	2033	Columbia Basin	Bureau of Reclamation	9/30/2012	9/30/2062	11	11	3.375%					11		
248	2033	Columbia River Fish Mitigation	Corps of Engineers	9/30/2012	9/30/2062	101,616	101,616	3.375%					101,616		
249	2033	Hills Creek	Corps of Engineers	9/30/2012	9/30/2062	142	142	3.375%					142		
250	2033	Ice Harbor	Corps of Engineers	9/30/2012	9/30/2062	115	115	3.375%					115		
251	2033	John Day	Corps of Engineers	9/30/2012	9/30/2062	6,161	6,161	3.375%					6,161		
252	2033	Libby	Corps of Engineers	9/30/2012	9/30/2062	16	16	3.375%					16		
253	2033	Lookout Dam	Corps of Engineers	9/30/2012	9/30/2062	294	294	3.375%					294		
254	2033	Lower Monument	Corps of Engineers	9/30/2012	9/30/2062	89	89	3.375%					89		
255	2033	McNary	Corps of Engineers	9/30/2012	9/30/2062	12	11	3.375%					11		
256	2033	RRP - Green Springs	Bureau of Reclamation	9/30/2012	9/30/2062	2	2	3.375%					2		
257	2033	Bonneville Dam	Corps of Engineers	9/30/2015	9/30/2065	102	102	3.250%					102		
258	2033	Columbia River Fish Mitigation	Corps of Engineers	9/30/2015	9/30/2065	64,291	64,291	3.250%					64,291		
259	2033	Green Peter/Foster	Corps of Engineers	9/30/2015	9/30/2065	68	68	3.250%					68		
260	2033	Hungry Horse Dam	Bureau of Reclamation	9/30/2015	9/30/2065			3.250%							
261	2033	Ice Harbor	Corps of Engineers	9/30/2015	9/30/2065	3,175	3,175	3.250%					3,175		
262	2033	John Day	Corps of Engineers	9/30/2015	9/30/2065	163	163	3.250%					163		
263	2033	Lower Granite	Corps of Engineers	9/30/2015	9/30/2065	1,597	1,597	3.250%					1,597		
264	2033	Minidoka/Palisades	Bureau of Reclamation	9/30/2015	9/30/2065	19,237	19,237	3.250%					19,237		
265	2033	The Dalles	Corps of Engineers	9/30/2015	9/30/2065	302	302	3.250%					302		
266	2033	Columbia River Fish Mitigation	Corps of Engineers	9/30/2019	9/30/2069	63,746	87,381	3.130%					24,039		
267	2033	Columbia River Fish Mitigation	Corps of Engineers	9/30/2020	9/30/2070	31,796	35,551	3.440%					35,551		
268		<b>FY 2033 Subtotal:</b>	-	-	-	<b>478,139</b>	<b>497,308</b>	-					<b>433,966</b>		
269	2034	Bureau Direct	-	2/27/2012	2/28/2034	55,000	55,000	2.476%					55,000		
270	2034	Bureau Direct	-	6/30/2013	1/31/2039	35,000	35,000	2.497%					33,320		1,680
271	2034	Bureau Direct	-	8/31/2018	1/31/2045	13,000	13,000	2.497%					11,578		1,422
272	2034	Bureau Direct	-	8/31/2018	6/30/2045	16,000	16,000	2.530%					14,233		1,767
273	2034	Corps	-	8/31/2018	7/31/2046	32,000	32,000	2.497%					18,149		2,500
274	2034	Corps	-	8/31/2018	11/30/2046	25,000	25,000	2.544%					22,027		2,973
275	2034	Corps	-	8/31/2018	5/31/2047	21,000	21,000	2.544%					18,436		2,564
276	2034	Corps	-	8/31/2018	6/30/2047	24,000	24,000	2.530%					20,966		3,034
277	2034	Bonneville Dam	Corps of Engineers	9/30/2013	9/30/2063	268	268	2.875%					268		
278	2034	Chief Joseph	Corps of Engineers	9/30/2013	9/30/2063	10	10	2.875%					10		
279	2034	Columbia Basin	Bureau of Reclamation	9/30/2013	9/30/2063	3,078	3,078	2.875%					3,078		
280	2034	Columbia River Fish Mitigation	Corps of Engineers	9/30/2013	9/30/2063	95,274	95,274	2.875%					95,274		
281	2034	Cougar	Corps of Engineers	9/30/2013	9/30/2063	4,088	4,088	2.875%					4,088		
282	2034	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2013	9/30/2063	528	528	2.875%					528		
283	2034	John Day	Corps of Engineers	9/30/2013	9/30/2063	17	17	2.875%					17		
284	2034	Little Goose	Corps of Engineers	9/30/2013	9/30/2063	66	66	2.875%					66		
285	2034	McNary	Corps of Engineers	9/30/2013	9/30/2063	1,000	1,000	2.875%					1,000		
286	2034	RRP - Green Springs	Bureau of Reclamation	9/30/2013	9/30/2063			2.875%							
287	2034	Boise	Bureau of Reclamation	9/30/2016	9/30/2066	118	118	3.000%					118		
288	2034	Columbia River Fish Mitigation	Corps of Engineers	9/30/2016	9/30/2066	30,066	30,066	3.000%					30,066		
289	2034	Cougar	Corps of Engineers	9/30/2016	9/30/2066	2	2	3.000%					2		
290	2034	Detroit Lake/Big Cliff	Corps of Engineers	9/30/2016	9/30/2066	31	31	3.000%					31		
291	2034	Green Peter/Foster	Corps of Engineers	9/30/2016	9/30/2066	70	70	3.000%					70		
292	2034	Ice Harbor	Corps of Engineers	9/30/2016	9/30/2066	558	558	3.000%					558		
293	2034	Lower Granite	Corps of Engineers	9/30/2016	9/30/2066	1,878	1,878	3.000%					1,878		
294	2034	Lower Monument	Corps of Engineers	9/30/2016	9/30/2066	155	155	3.000%					155		
295	2034	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2016	9/30/2066	1,256	1,256	3.000%					1,256		
296	2034	Minidoka/Palisades	Bureau of Reclamation	9/30/2016	9/30/2066	206	206	3.000%					206		
297	2034	The Dalles	Corps of Engineers	9/30/2016	9/30/2066	4	4	3.000%					4		
298	2034	Columbia Basin	Bureau of Reclamation	9/30/2018	9/30/2068	52	52	2.750%					52		
299	2034	Columbia River Fish Mitigation	Corps of Engineers	9/30/2018	9/30/2068	48,446	48,446	2.750%					48,446		
300	2034	Libby	Corps of Engineers	9/30/2018	9/30/2068	282	282	2.750%					282		
301	2034	Little Goose	Corps of Engineers	9/30/2018	9/30/2068	2,707	2,707	2.750%					2,707		

**TABLE 12D**  
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**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinance Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount	
302	2034	Lower Snake Fish and Wildlife	Lower Snake Fish & Wildlife	9/30/2018	9/30/2068	1,608	1,608	2.750%							1,608	
303	2034	Minidoka/Palisades	Bureau of Reclamation	9/30/2018	9/30/2068	9	9	2.750%							9	
304	2034	The Dalles	Corps of Engineers	9/30/2018	9/30/2068	14	14	2.750%							14	
305	2034	Yakima Chandler/Kennewick	Bureau of Reclamation	9/30/2018	9/30/2068	49	49	2.750%							49	
306	2034	Columbia River Fish Mitigation	Corps of Engineers	9/30/2019	9/30/2069	63,746	63,342	3.130%							63,342	
307		<b>FY 2034 Subtotal:</b>	-	-	-	<b>476,587</b>	<b>476,182</b>	-							<b>448,890</b>	<b>15,941</b>
308	2035	Corps	-	2/29/2016	2/28/2045	3,000	3,000	2.476%							2,692	308
309	2035	Bureau Direct	-	8/31/2018	2/28/2045	5,000	5,000	2.476%							4,487	513
310	2035	Bureau Direct	-	9/28/2018	2/28/2045	29,000	29,000	2.476%							26,023	2,977
311	2035	Bureau Direct	-	8/31/2018	3/31/2045	26,000	26,000	2.455%							23,306	2,694
312	2035	Corps	-	8/31/2018	7/31/2046	32,000	11,351	2.497%							10,070	1,281
313	2035	Corps	-	8/31/2018	10/31/2046	27,000	27,000	2.497%							23,915	3,085
314	2035	Corps	-	8/31/2018	2/28/2047	7,000	7,000	2.476%							6,161	839
315	2035	Corps	-	8/31/2018	3/31/2047	24,000	24,000	2.455%							21,099	2,901
316	2035	Corps	-	9/28/2018	1/31/2048	2,000	2,000	2.497%							1,748	252
317	2035	Corps	-	9/28/2018	3/31/2048	54,200	54,200	2.455%							47,202	6,998
318	2035	Corps	-	9/28/2018	7/31/2048	64,000	64,000	2.497%							55,742	8,258
319	2035	Corps	-	9/28/2018	8/31/2048	17,000	17,000	2.476%							14,769	2,231
320	2035	Replacements	-	3/31/2022	3/31/2067	213,150	213,150	4.150%							177,091	
321	2035	Columbia Basin	Bureau of Reclamation	9/30/2017	9/30/2067	2,865	2,865	2.375%							2,865	
322	2035	Cougar	Corps of Engineers	9/30/2017	9/30/2067	2	2	2.375%							2	
323	2035	Columbia River Fish Mitigation	Corps of Engineers	9/30/2017	9/30/2067	57,719	57,719	2.375%							57,719	
324	2035	Lower Monument	Corps of Engineers	9/30/2017	9/30/2067	942	942	2.375%							942	
325	2035	McNary	Corps of Engineers	9/30/2017	9/30/2067	239	239	2.375%							239	
326	2035	Minidoka/Palisades	Bureau of Reclamation	9/30/2017	9/30/2067	127	127	2.375%							127	
327	2035	The Dalles	Corps of Engineers	9/30/2017	9/30/2067	10	10	2.375%							10	
328		<b>FY 2035 Subtotal:</b>	-	-	-	<b>565,253</b>	<b>544,604</b>	-							<b>476,208</b>	<b>32,338</b>
329	2036	Replacements	-	3/31/2022	3/31/2067	213,150	36,058	4.150%							36,058	
330	2036	Replacements	-	3/31/2023	3/31/2068	213,150	213,150	4.150%							213,150	
331	2036	Replacements	-	3/31/2024	3/31/2069	213,150	213,150	4.150%							213,150	
332	2036	Replacements	-	3/31/2025	3/31/2070	213,150	213,150	4.150%							16,786	
333		<b>FY 2036 Subtotal:</b>	-	-	-	<b>852,599</b>	<b>675,508</b>	-							<b>479,144</b>	
334	2037	Replacements	-	3/31/2025	3/31/2070	213,150	196,364	4.150%							196,364	
335	2037	Replacements	-	3/31/2026	3/31/2071	213,150	213,150	4.150%							213,150	
336	2037	Replacements	-	3/31/2027	3/31/2072	213,150	213,150	4.150%							99,519	
337		<b>FY 2037 Subtotal:</b>	-	-	-	<b>639,449</b>	<b>622,663</b>	-							<b>509,033</b>	
338	2038	Replacements	-	3/31/2027	3/31/2072	213,150	113,631	4.150%							113,631	
339	2038	Replacements	-	3/31/2028	3/31/2073	213,150	213,150	4.150%							213,150	
340	2038	Replacements	-	3/31/2029	3/31/2074	213,150	213,150	4.150%							213,150	
341	2038	Replacements	-	3/31/2030	3/31/2075	213,150	213,150	4.150%							29,474	
342		<b>FY 2038 Subtotal:</b>	-	-	-	<b>852,599</b>	<b>753,080</b>	-							<b>569,404</b>	
343	2039	Replacements	-	3/31/2030	3/31/2075	213,150	183,676	4.150%							183,676	
344	2039	Replacements	-	3/31/2031	3/31/2076	213,150	213,150	4.150%							213,150	
345	2039	Replacements	-	3/31/2032	3/31/2077	213,150	213,150	4.150%							213,150	
346	2039	Replacements	-	3/31/2033	3/31/2078	213,150	213,150	4.150%							48,038	
347		<b>FY 2039 Subtotal:</b>	-	-	-	<b>852,599</b>	<b>823,126</b>	-							<b>658,014</b>	
348	2040	Replacements	-	3/31/2033	3/31/2078	213,150	165,111	4.150%							165,111	
349	2040	Replacements	-	3/31/2034	3/31/2079	213,150	213,150	4.150%							213,150	
350	2040	Replacements	-	3/31/2035	3/31/2080	213,150	213,150	4.150%							213,150	
351	2040	Replacements	-	3/31/2036	3/31/2081	213,150	213,150	4.150%							103,685	
352		<b>FY 2040 Subtotal:</b>	-	-	-	<b>852,599</b>	<b>804,561</b>	-							<b>695,096</b>	
353	2041	Replacements	-	3/31/2036	3/31/2081	213,150	109,465	4.150%							109,465	
354	2041	Replacements	-	3/31/2037	3/31/2082	213,150	213,150	4.150%							213,150	
355	2041	Replacements	-	3/31/2038	3/31/2083	213,150	213,150	4.150%							213,150	
356	2041	Replacements	-	3/31/2039	3/31/2084	213,150	213,150	4.150%							113,159	
357		<b>FY 2041 Subtotal:</b>	-	-	-	<b>852,599</b>	<b>748,914</b>	-							<b>648,923</b>	
358	2042	Replacements	-	3/31/2039	3/31/2084	213,150	99,991	4.150%							99,991	
359	2042	Replacements	-	3/31/2040	3/31/2085	213,150	213,150	4.150%							213,150	
360	2042	Replacements	-	3/31/2041	3/31/2086	213,150	213,150	4.150%							213,150	

**TABLE 12D**  
**Application of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Fiscal Year	Project	Debt Type	In Service	Bond Due Date	Initial Principal	Current Principal	Original Rate	Effective Rate	Refinance Type	Refinanced Date	Maturity Date	Roll Rate	Principal Paid	Premium	Discount
361	<b>FY 2042 Subtotal:</b>	-	-	-	<b>639,449</b>	<b>526,291</b>	-	-	-	-	-	-	<b>526,291</b>		
362	2043 Replacements	-	3/31/2042	3/31/2087	213,150	213,150	4.150%	4.150%					213,150		
363	<b>FY 2043 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
364	2044 Replacements	-	3/31/2043	3/31/2088	213,150	213,150	4.150%	4.150%					213,150		
365	<b>FY 2044 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
366	2045 Replacements	-	3/31/2044	3/31/2089	213,150	213,150	4.150%	4.150%					213,150		
367	<b>FY 2045 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
368	2046 Replacements	-	3/31/2045	3/31/2090	213,150	213,150	4.150%	4.150%					213,150		
369	<b>FY 2046 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
370	2047 Replacements	-	3/31/2046	3/31/2091	213,150	213,150	4.150%	4.150%					213,150		
371	<b>FY 2047 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
372	2048 Replacements	-	3/31/2047	3/31/2092	213,150	213,150	4.150%	4.150%					213,150		
373	<b>FY 2048 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
374	2049 Replacements	-	3/31/2048	3/31/2093	213,150	213,150	4.150%	4.150%					213,150		
375	<b>FY 2049 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
376	2050 Replacements	-	3/31/2049	3/31/2094	213,150	213,150	4.150%	4.150%					213,150		
377	<b>FY 2050 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
378	2051 Replacements	-	3/31/2050	3/31/2095	213,150	213,150	4.150%	4.150%					213,150		
379	<b>FY 2051 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
380	2052 Replacements	-	3/31/2051	3/31/2096	213,150	213,150	4.150%	4.150%					213,150		
381	<b>FY 2052 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
382	2053 Replacements	-	3/31/2052	3/31/2097	213,150	213,150	4.150%	4.150%					213,150		
383	<b>FY 2053 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
384	2054 Replacements	-	3/31/2053	3/31/2098	213,150	213,150	4.150%	4.150%					213,150		
385	<b>FY 2054 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
386	2055 Replacements	-	3/31/2054	3/31/2099	213,150	213,150	4.150%	4.150%					213,150		
387	<b>FY 2055 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
388	2056 Replacements	-	3/31/2055	3/31/2100	213,150	213,150	4.150%	4.150%					213,150		
389	<b>FY 2056 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
390	2057 Replacements	-	3/31/2056	3/31/2101	213,150	213,150	4.150%	4.150%					213,150		
391	<b>FY 2057 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
392	2058 Replacements	-	3/31/2057	3/31/2102	213,150	213,150	4.150%	4.150%					213,150		
393	<b>FY 2058 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
394	2059 Replacements	-	3/31/2058	3/31/2103	213,150	213,150	4.150%	4.150%					213,150		
395	<b>FY 2059 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
396	2060 Replacements	-	3/31/2059	3/31/2104	213,150	213,150	4.150%	4.150%					213,150		
397	<b>FY 2060 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
398	2061 Replacements	-	3/31/2060	3/31/2105	213,150	213,150	4.150%	4.150%					213,150		
399	<b>FY 2061 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
400	2062 Replacements	-	3/31/2061	3/31/2106	213,150	213,150	4.150%	4.150%					213,150		
401	<b>FY 2062 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
402	2063 Replacements	-	3/31/2062	3/31/2107	213,150	213,150	4.150%	4.150%					213,150		
403	<b>FY 2063 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
404	2064 Replacements	-	3/31/2063	3/31/2108	213,150	213,150	4.150%	4.150%					213,150		
405	<b>FY 2064 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
406	2065 Replacements	-	3/31/2064	3/31/2109	213,150	213,150	4.150%	4.150%					213,150		
407	<b>FY 2065 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
408	2066 Replacements	-	3/31/2065	3/31/2110	213,150	213,150	4.150%	4.150%					213,150		
409	<b>FY 2066 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
410	2067 Replacements	-	3/31/2066	3/31/2111	213,150	213,150	4.150%	4.150%					213,150		
411	<b>FY 2067 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
412	2068 Replacements	-	3/31/2067	3/31/2112	213,150	213,150	4.150%	4.150%					213,150		
413	<b>FY 2068 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
414	2069 Replacements	-	3/31/2068	3/31/2113	213,150	213,150	4.150%	4.150%					213,150		
415	<b>FY 2069 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
416	2070 Replacements	-	3/31/2069	3/31/2114	213,150	213,150	4.150%	4.150%					213,150		
417	<b>FY 2070 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
418	2071 Replacements	-	3/31/2070	3/31/2115	213,150	213,150	4.150%	4.150%					213,150		
419	<b>FY 2071 Subtotal:</b>	-	-	-	<b>213,150</b>	<b>213,150</b>	-	-					<b>213,150</b>		
420	<b>Grand Total</b>				<b>\$21,053,060</b>	<b>\$18,244,845</b>	-	-					<b>\$15,239,766</b>	<b>\$21,867</b>	<b>\$48,279</b>

**TABLE 12E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
				2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2	Appropriation	Bureau of Reclamation	Boise	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2
3			Columbia Basin	449	408	408	408	408	408	408	408	408	408	408	260	223	223	158	157
4			Hungry Horse Dam	59	55	55	55	55	55	55	55	55	55	55	53	19	19		
5			Mindokola/Palisades	635	635	635	635	635	635	635	635	635	635	635	635	635	635	635	9
6			RRP - Green Springs																
7			Yakima Chandler/Kennwick	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
8			<b>Bureau of Reclamation Subtotal:</b>	1,152	1,105	1,105	1,105	1,105	1,105	1,105	1,105	1,105	1,105	1,105	953	882	882	798	169
9		Corps of Engineers	Albeni Falls	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	-
10			Bonneville Dam	1,433	721	721	721	721	721	721	721	721	721	721	603	422	422	11	8
11			Chief Joseph	1,254	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1	1	1	
12			Columbia River Fish Mitigation	46,042	39,699	40,922	42,988	42,923	42,805	41,518	40,345	40,041	39,255	36,735	28,619	26,127	24,174	15,821	7,661
13			Cougar	146	146	146	146	146	146	146	146	146	146	146	141	133	133	122	118
14			Detroit Lake/Big Cliff	17	17	17	17	17	17	17	17	17	17	17	17	17	16	16	16
15			Dworshak	105	104	104	104	104	104	104	104	104	104	104	-	-	-	-	-
16			Green Peter/Foster	23	23	23	23	23	23	23	23	23	23	23	23	23	9	5	2
17			Hills Creek	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-
18			Ice Harbor	278	278	278	278	278	278	278	278	278	278	278	163	154	154	124	17
19			John Day	330	303	303	303	303	303	303	303	303	303	303	235	220	220	214	1
20			Libby	92	16	16	16	16	16	16	16	16	16	16	16	14	14	8	4
21			Little Goose	217	216	216	216	216	216	216	216	216	216	216	78	76	76	76	39
22			Lookout Dam	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	-
23			Lost Creek																-
24			Lower Granite	509	508	508	508	508	508	508	508	508	508	508	260	211	109	108	56
25			Lower Monument	201	188	188	188	188	188	188	188	188	188	188	85	85	30	30	27
26			McNary	279	85	85	85	85	85	85	85	85	85	85	85	85	56	35	34
27			The Dalles	182	11	11	11	11	11	11	11	11	11	11	11	11	11	11	1
28			<b>Corps of Engineers Subtotal:</b>	51,130	43,419	44,642	46,707	46,643	46,524	45,237	44,064	43,760	42,975	40,454	31,440	27,598	25,441	16,598	7,983
29		Lower Snake Fish & Wildlife	Lower Snake Fish and Wildlife	183	163	163	163	163	163	163	163	163	163	163	163	95	95	82	60
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	183	163	163	163	163	163	163	163	163	163	163	163	95	95	82	60
31			<b>Appropriation Subtotal:</b>	52,466	44,686	45,909	47,975	47,910	47,792	46,504	45,331	45,027	44,242	41,722	32,555	28,575	26,418	17,478	8,212
32	Treasury	BPA Borrowing	(Less Interest Income)	(2,151)	(1,225)	(2,874)	(2,091)	(969)	(977)	(980)	(980)	(1,000)	(1,029)	(2,528)	(2,048)	(2,118)	(2,373)	(2,412)	(2,421)
33			Bureau Direct	33,933	30,679	31,803	27,101	22,720	22,156	22,156	22,156	22,156	22,156	22,156	15,526	12,499	9,665	6,816	2,957
34			Interest Accrual	5,176	4,105	3,939	2,414	1,959	1,959	1,959	1,959	1,959	1,959	1,959	1,460	1,272	753	485	71
35			Interest Accrual Reversal	(5,080)	(5,176)	(4,105)	(3,939)	(2,414)	(1,959)	(1,959)	(1,959)	(1,959)	(1,959)	(1,959)	(1,460)	(1,272)	(753)	(485)	(485)
36			Conservation	10,069	10,069	10,069	9,591	7,742	4,136	2,851	1,322	1,140	312	-	-	-	-	-	-
37			Interest Accrual	2,258	2,258	2,178	2,120	1,282	689	304	259	259	-	-	-	-	-	-	-
38			Interest Accrual Reversal	(2,258)	(2,258)	(2,258)	(2,178)	(2,120)	(1,282)	(689)	(304)	(259)	(259)	-	-	-	-	-	-
39			Construction (AS)	780	606	557	1,071	1,006	942	878	662	662	-	-	-	-	-	-	-
40			Interest Accrual	198	95	61	32	32	-	-	-	-	-	-	-	-	-	-	-
41			Interest Accrual Reversal	(186)	(198)	(95)	(61)	(32)	(32)	-	-	-	-	-	-	-	-	-	-
42			Corps	9,011	10,150	14,582	20,314	20,314	20,314	20,314	20,314	20,314	20,314	20,314	17,378	13,011	10,157	8,418	6,924
43			Interest Accrual	2,088	2,273	2,371	2,371	2,371	2,371	2,371	2,371	2,371	2,371	2,371	2,054	1,468	1,284	1,284	655
44			Interest Accrual Reversal	(1,167)	(2,088)	(2,273)	(2,371)	(2,371)	(2,371)	(2,371)	(2,371)	(2,371)	(2,371)	(2,371)	(2,371)	(2,054)	(1,468)	(1,284)	(1,284)
45			Fish and Wildlife	12,083	11,051	12,738	17,326	15,902	15,956	15,956	14,516	11,927	10,553	8,848	7,789	5,008	1,483	639	-
46			Interest Accrual	1,876	1,876	1,876	1,648	1,648	1,648	1,648	1,068	513	513	17	17	-	-	-	-
47			Interest Accrual Reversal	(1,924)	(1,876)	(1,876)	(1,876)	(1,648)	(1,648)	(1,648)	(1,648)	(1,068)	(513)	(513)	(17)	(17)	-	-	-
48			Technology (G)	664	664	550	1,266	144	144	144	-	-	-	-	-	-	-	-	-
49			Interest Accrual	110	110	25	-	-	-	-	-	-	-	-	-	-	-	-	-
50			Interest Accrual Reversal	(110)	(110)	(110)	(25)	-	-	-	-	-	-	-	-	-	-	-	-
51			<b>BPA Borrowing Subtotal:</b>	65,370	61,004	67,159	72,713	65,566	62,040	60,937	57,366	54,644	52,048	48,295	37,829	27,610	18,227	13,194	6,416
52		Federal Generation Replacements	Replacements	-	-	-	4,423	13,269	22,114	30,960	39,806	48,651	57,497	66,343	75,189	84,034	92,880	101,726	110,571
53			<b>Federal Generation Replacements Subtotal:</b>	-	-	-	4,423	13,269	22,114	30,960	39,806	48,651	57,497	66,343	75,189	84,034	92,880	101,726	110,571
54			<b>Treasury Subtotal:</b>	65,370	61,004	67,159	77,136	78,835	84,154	91,897	97,172	103,295	109,546	114,637	113,017	111,645	111,107	114,920	116,988
55	<b>Grand Total:</b>			<b>\$117,836</b>	<b>\$105,690</b>	<b>\$113,068</b>	<b>\$125,111</b>	<b>\$126,744</b>	<b>\$131,946</b>	<b>\$138,401</b>	<b>\$142,503</b>	<b>\$148,323</b>	<b>\$153,787</b>	<b>\$156,359</b>	<b>\$145,572</b>	<b>\$140,220</b>	<b>\$137,526</b>	<b>\$132,397</b>	<b>\$125,200</b>

**TABLE 12E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

1	A	B	C	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
	Obligation Type	General Project	Specific Project	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
2	Appropriation	Bureau of Reclamation	Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3			Columbia Basin	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5			Minidoka/Palsades	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7			Yakima Chandler/Kennewick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8			<b>Bureau of Reclamation Subtotal:</b>	<b>36</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		Corps of Engineers	Albani Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12			Columbia River Fish Mitigation	685	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16			Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18			Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25			Lower Monument	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26			McNary	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28			<b>Corps of Engineers Subtotal:</b>	<b>700</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		Lower Snake Fish & Wildlife	Lower Snake Fish & Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	<b>-</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31			<b>Appropriation Subtotal:</b>	<b>735</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Treasury	BPA Borrowing	(Less Interest Income)	(2,535)	(2,622)	(2,672)	(2,847)	(3,284)	(3,345)	(3,431)	(3,480)	(3,518)	(3,015)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)
33			Bureau Direct	738	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			Interest Accrual Reversal	(71)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36			Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39			Construction (AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42			Corps	2,932	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			Interest Accrual Reversal	(655)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45			Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48			Technology (G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51			<b>BPA Borrowing Subtotal:</b>	<b>409</b>	<b>(2,622)</b>	<b>(2,672)</b>	<b>(2,847)</b>	<b>(3,284)</b>	<b>(3,345)</b>	<b>(3,431)</b>	<b>(3,480)</b>	<b>(3,518)</b>	<b>(3,015)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>	<b>(1,506)</b>
52		Federal Generation Replacements	Replacements	115,743	110,971	99,312	85,781	69,157	49,926	30,883	15,343	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846
53			<b>Federal Generation Replacements Subtotal:</b>	<b>115,743</b>	<b>110,971</b>	<b>99,312</b>	<b>85,781</b>	<b>69,157</b>	<b>49,926</b>	<b>30,883</b>	<b>15,343</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>	<b>8,846</b>
54			<b>Treasury Subtotal:</b>	<b>116,151</b>	<b>108,350</b>	<b>96,640</b>	<b>82,934</b>	<b>65,874</b>	<b>46,581</b>	<b>27,452</b>	<b>11,863</b>	<b>5,328</b>	<b>5,831</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>	<b>7,340</b>
55	<b>Grand Total:</b>			<b>\$116,886</b>	<b>\$108,350</b>	<b>\$96,640</b>	<b>\$82,934</b>	<b>\$65,874</b>	<b>\$46,581</b>	<b>\$27,452</b>	<b>\$11,863</b>	<b>\$5,328</b>	<b>\$5,831</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>

**TABLE 12E:**  
**Summary of Interest**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

1	A	B	C	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	
	Obligation Type	General Project	Specific Project	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	Total	
2	Appropriation	Bureau of Reclamation	Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66	
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,586	
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	702	
5			Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,534	
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
7			Yakima Chandler/Kennewick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,918	
9		Corps of Engineers	Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,109	
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,173	
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	556,360	
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,254	
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	266	
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,147	
16			Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	320	
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	
18			Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,668	
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,252	
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	305	
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,726	
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,336	
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,345	
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,432	
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	605,315	
29		Lower Snake Fish & Wildlife	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,305	
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,305	
31			<b>Appropriation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	623,537	
32	Treasury	BPA Borrowing	(Less Interest Income)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(99,578)	
33			Bureau Direct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	327,373	
34			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33,387	
35			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(38,467)	
36			Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57,299	
37			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,606	
38			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,863)	
39			Construction (AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,165	
40			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	418	
41			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(603)	
42			Corps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	255,077	
43			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,443	
44			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(33,610)	
45			Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161,776	
46			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,349	
47			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(16,273)	
48			Technology (G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,575	
49			Interest Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	244	
50			Interest Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(353)	
51			<b>BPA Borrowing Subtotal:</b>	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	(1,506)	701,964	
52		Federal Generation Replacements	Replacements	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	1,581,106
53			<b>Federal Generation Replacements Subtotal:</b>	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	8,846	1,581,106
54			<b>Treasury Subtotal:</b>	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	7,340	2,283,070	
55	<b>Grand Total:</b>			<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$7,340</b>	<b>\$2,906,607</b>	

**TABLE 12F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Obligation Type	General Project	Specific Project	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1	Appropriation	Bureau of Reclamation	64	-	-	-	-	-	-	-	-	-	17	-	-	-	-	118	-
2		Boise	64	-	-	-	-	-	-	-	-	-	17	-	-	-	-	118	-
3		Columbia Basin	835	-	-	-	-	-	-	-	-	-	3,325	877	-	1,723	11	3,130	2,865
4		Hungry Horse Dam	76	-	-	-	-	-	-	-	-	-	60	779	12	503	3	-	-
5		Minidoka/Palisades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,244	215
6		RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
7		Yakima Chandler/Kemniwick	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	49
8		<b>Bureau of Reclamation Subtotal:</b>	975	-	-	-	-	-	-	-	-	-	3,418	1,656	12	2,226	19,259	3,513	2,991
9		Corps of Engineers	-	-	-	-	-	-	-	-	-	-	-	99	-	-	-	-	-
10		Bonneville Dam	14,609	-	-	-	-	-	-	-	-	-	2,628	4,169	-	10,963	102	268	-
11		Chief Joseph	3,500	-	-	-	-	-	-	-	-	-	-	24,727	-	4	28	10	-
12		Columbia River Fish Mitigation	197,047	-	-	1,439	2,627	28,608	26,065	6,756	17,455	56,007	183,179	58,564	50,418	222,724	225,497	237,129	57,719
13		Cougar	-	-	-	-	-	-	-	-	-	-	109	180	-	293	139	4,090	2
14		Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	558	-
15		Dworshak	10	-	-	-	-	-	-	-	-	-	-	-	2,380	-	-	-	-
16		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	385	87	97	70	-
17		Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	12	142	-	-
18		Ice Harbor	14	-	-	-	-	-	-	-	-	-	2,615	207	-	819	3,290	558	-
19		John Day	601	-	-	-	-	-	-	-	-	-	1,548	356	-	175	6,325	17	-
20		Libby	1,567	-	-	-	-	-	-	-	-	-	-	40	-	152	16	282	-
21		Little Goose	13	-	-	-	-	-	-	-	-	-	3,171	30	-	-	-	2,773	-
22		Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	17	294	-	-
23		Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-
24		Lower Granite	24	-	-	-	-	-	-	-	-	-	5,669	1,156	2,644	8	1,597	1,878	-
25		Lower Monument	294	-	-	-	-	-	-	-	-	-	2,332	-	1,430	-	89	155	942
26		McNary	4,295	-	-	-	-	-	-	-	-	-	-	-	759	565	11	1,000	239
27		The Dalles	3,681	-	-	-	-	-	-	-	-	-	-	-	-	-	302	18	10
28		<b>Corps of Engineers Subtotal:</b>	225,656	-	-	1,439	2,627	28,608	26,065	6,756	17,455	56,007	203,631	89,529	55,654	235,824	237,928	248,805	58,911
29		Lower Snake Fish & Wildlife	453	-	-	-	-	-	-	-	-	-	-	1,545	-	343	-	2,864	-
30		<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	453	-	-	-	-	-	-	-	-	-	-	1,545	-	343	-	2,864	-
31		<b>Appropriation Subtotal:</b>	227,084	-	-	1,439	2,627	28,608	26,065	6,756	17,455	56,007	207,048	92,730	55,666	238,394	257,188	255,182	61,903
32	Bond	BPA Borrowing	145,000	121,072	221,065	188,863	-	-	-	-	-	-	171,000	62,000	82,000	86,221	109,779	114,130	53,815
33		Bureau Direct	145,000	121,072	221,065	188,863	-	-	-	-	-	-	171,000	62,000	82,000	86,221	109,779	114,130	53,815
34		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36		Conservation	-	-	19,000	45,000	102,000	70,000	64,000	6,000	18,000	25,000	-	-	-	-	-	-	-
37		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39		Construction (AS)	5,250	18,100	7,000	5,800	-	4,200	6,000	-	18,000	-	-	-	-	-	-	-	-
40		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42		Corps	-	33,900	236,000	-	-	-	-	-	-	-	-	181,486	77,514	52,100	49,000	79,578	183,399
43		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45		Fish and Wildlife	46,000	-	-	51,000	-	-	-	80,000	55,000	26,000	56,000	8,000	142,000	47,000	18,000	-	-
46		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48		Technology (G)	-	-	35,000	32,000	-	-	4,000	-	-	-	-	-	-	-	-	-	-
49		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51		<b>BPA Borrowing Subtotal:</b>	196,250	173,072	518,065	322,663	102,000	74,200	74,000	86,000	91,000	51,000	227,000	251,486	301,514	185,321	176,779	193,708	237,214
52		Replacements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	177,091
53		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55		<b>Federal Generation Replacements Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	177,091
56		Make Whole Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57		Discounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(15,941)
58		Premiums	-	13	10	20,379	-	-	-	-	-	-	-	1,465	-	-	-	-	-
59		<b>Make Whole Call Subtotal:</b>	-	13	10	20,379	-	-	-	-	-	-	-	1,465	-	-	-	-	(15,941)
60		<b>Bond Subtotal:</b>	196,250	173,072	518,065	322,663	102,000	74,200	74,000	86,000	91,000	51,000	227,000	251,486	301,514	185,321	176,779	209,649	446,643
61	Irrigation	Irrigation Assistance	56,604	24,331	14,747	16,060	12,852	15,111	13,550	20,774	6,121	11,191	4,065	1,996	10,530	-	4,347	-	7,766
62		<b>Irrigation Assistance Subtotal:</b>	56,604	24,331	14,747	16,060	12,852	15,111	13,550	20,774	6,121	11,191	4,065	1,996	10,530	-	4,347	-	7,766
63		<b>Irrigation Subtotal:</b>	56,604	24,331	14,747	16,060	12,852	15,111	13,550	20,774	6,121	11,191	4,065	1,996	10,530	-	4,347	-	7,766
64	<b>Grand Total:</b>		\$479,938	\$197,403	\$532,811	\$340,162	\$117,479	\$117,919	\$113,616	\$113,530	\$114,576	\$118,198	\$438,113	\$346,213	\$367,710	\$423,715	\$438,313	\$464,831	\$516,312



**TABLE 12F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

A	B	C	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL
1	Obligation Type	General Project																		
2	Appropriation	Bureau of Reclamation	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
3		Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4		Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5		Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6		Minidoka/Palises	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7		RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8		Yakima Chandler/Kemniwick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9		Bureau of Reclamation Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10		Corps of Engineers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11		Albeni Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12		Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14		Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15		Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16		Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17		Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18		Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19		Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20		Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21		John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22		Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23		Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25		Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26		Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27		Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28		McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29		The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30		Corps of Engineers Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31		Lower Snake Fish & Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32		Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33		Lower Snake Fish & Wildlife Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34		Appropriation Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Bond	BPA Borrowing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36		Bureau Direct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39		Conservation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42		Construction (AS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45		Corps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48		Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51		Technology (G)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54		BPA Borrowing Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55		Federal Generation Replacements	479,144	509,033	569,404	658,014	695,096	648,923	526,291	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150
56		Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57		Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58		Federal Generation Replacements Subtotal:	479,144	509,033	569,404	658,014	695,096	648,923	526,291	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150
59		Make Whole Call	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60		Discounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
61		Premiums	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62		Make Whole Call Subtotal:	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63		Bond Subtotal:	479,144	509,033	569,404	658,014	695,096	648,923	526,291	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150
64	Irrigation	Irrigation Assistance	28,920	15,710	-	14,069	-	73,659	-	-	-	11,586	-	-	-	-	-	-	-	-
65		Irrigation Assistance Subtotal:	28,920	15,710	-	14,069	-	73,659	-	-	-	11,586	-	-	-	-	-	-	-	-
66		Irrigation Subtotal:	28,920	15,710	-	14,069	-	73,659	-	-	-	11,586	-	-	-	-	-	-	-	-
67	Grand Total:		\$508,065	\$524,742	\$569,404	\$672,084	\$695,096	\$722,582	\$526,291	\$213,150	\$213,150	\$224,736	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150

**TABLE 12F:**  
**Summary of Amortization**  
**October 1, 2018 - September 30, 2021 Cost Evaluation Period**  
**(\$000s) (FY 2021)**

	A	B	C	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	Obligation Type	General Project	Specific Project	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	Total
2	Appropriation	Bureau of Reclamation	Boise	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	199
3			Columbia Basin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,765
4			Hungry Horse Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,434
5			Mimidoka/Pailsades	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19,585
6			RRP - Green Springs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
7			Yakima Chandler/Kemniwick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
8			<b>Bureau of Reclamation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34,050
9		Corps of Engineers	Albani Falls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99
10			Bonneville Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,739
11			Chief Joseph	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,269
12			Columbia River Fish Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,371,235
13			Cougar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,813
14			Detroit Lake/Big Cliff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	576
15			Dworshak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,390
16			Green Peter/Foster	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	638
17			Hills Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154
18			Ice Harbor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,502
19			John Day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,021
20			Libby	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,056
21			Little Goose	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,987
22			Lookout Dam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	311
23			Lost Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
24			Lower Granite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,977
25			Lower Monument	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,244
26			McNary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,869
27			The Dalles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,010
28			<b>Corps of Engineers Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,494,897
29		Lower Snake Fish & Wildlife	Lower Snake Fish and Wildlife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,206
30			<b>Lower Snake Fish &amp; Wildlife Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,206
31			<b>Appropriation Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,534,153
32	Bond	BPA Borrowing	Bureau Direct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,354,945
33			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35			<b>Conservation</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349,000
36			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38			<b>Construction (AS)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64,350
39			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41			<b>Corps</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	892,976
42			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44			<b>Fish and Wildlife</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	529,000
45			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47			<b>Technology (G)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71,000
48			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50			<b>BPA Borrowing Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,261,271
51		Federal Generation Replacements	Replacements	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	10,444,342
52			Principal Accrual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53			Principal Accrual Reversal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54			<b>Federal Generation Replacements Subtotal:</b>	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	10,444,342
55		Make Whole Call	Discounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(48,279)
56			Premiums	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,867
57			<b>Make Whole Call Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(26,412)
58		<b>Bond Subtotal:</b>		213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	213,150	13,753,892
59	Irrigation	Irrigation Assistance	Irrigation Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,988
60			<b>Irrigation Assistance Subtotal:</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,988
61		<b>Irrigation Subtotal:</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	363,988
62	<b>Grand Total:</b>			\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$213,150	\$15,652,033

## **13. REPAYMENT THEORY AND OPERATION**

### **13.1 Introduction**

The Bonneville Power Administration (BPA) is required to collect sufficient revenues to meet the annual expenses and cover the long-term obligations of the Federal Columbia River Power System (FCRPS).

The Repayment Program is used to determine whether a given set of annual revenues is sufficient to meet a given set of annual expenses and cover a given set of long-term obligations when applied in accordance with the requirements of Department of energy (DOE) Order RA 6120.2. The Program is also used to determine by what minimum factor the future revenues can be multiplied to obtain a new set of revenues which will be sufficient.

The revenues and expenses of the cost evaluation year will be assigned to all future years. This will have the effect of levelizing the long-term obligations over all future years.

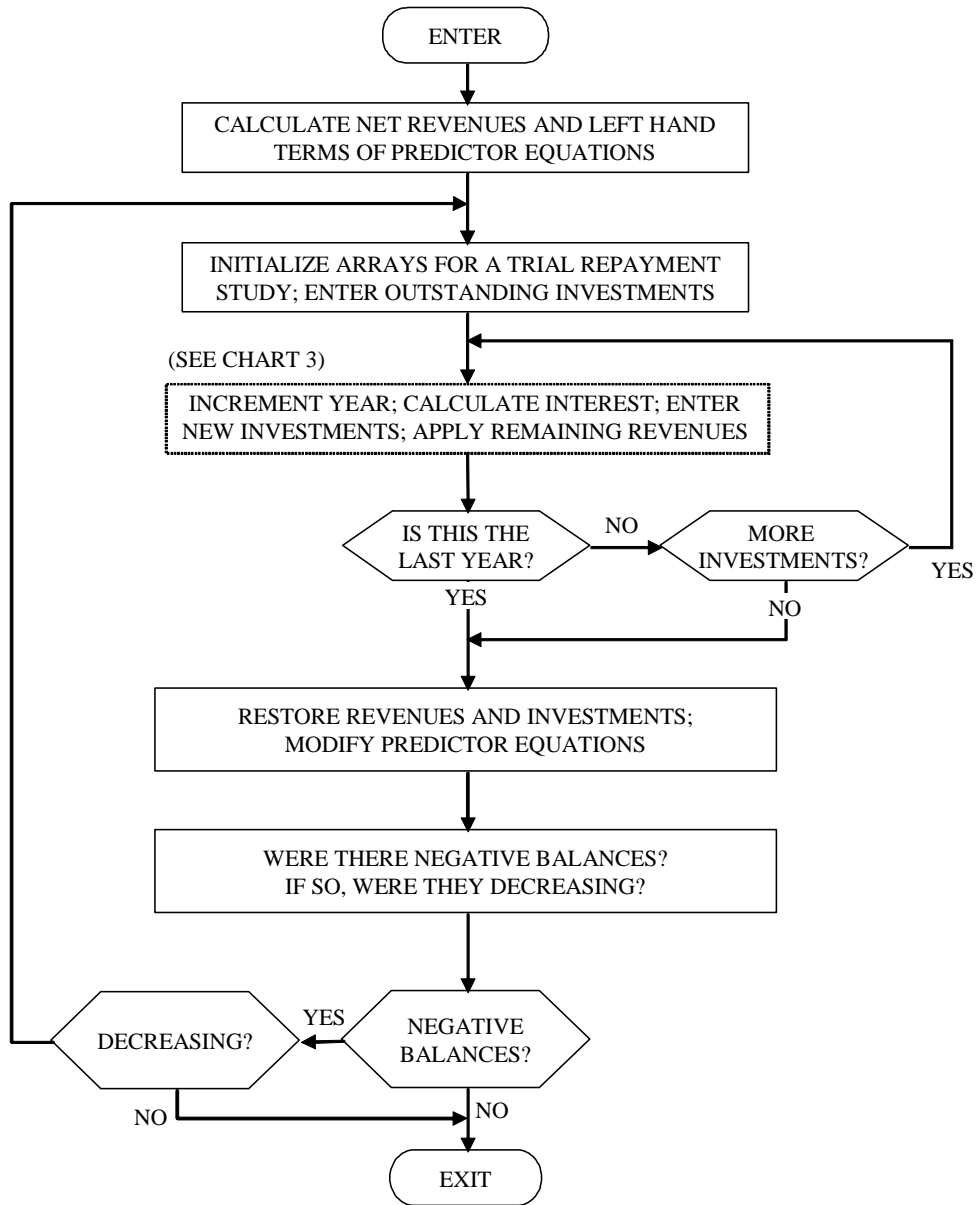
### **13.2 Repayment Program Logic**

The diagrams on the following pages show the flow of logic in BPA's repayment program. The first diagram shows the logic of the binary search used to locate minimum sufficient revenues. A necessary part of this search is the test for sufficiency. The logic of the test for sufficiency is shown on the remaining two diagrams.

The equations which are referred to are:

- Revenue Equation: Net revenues of each year are expended on interest and payments on the principles.
- Investment equation: The payments on each investment are less than or equal to the principle of that investment (and equal to the principle of that investment after the investment is due).
- Predictor equation: For each future year the accumulated revenues less the accumulated interest less the accumulated investments due is equal to the accumulated payments on high interest rate investments which are not due.

**REPAYMENT PROGRAM  
(TEST FOR SUFFICIENCY)**



**REPAYMENT PROGRAM  
(APPLICATION OF REVENUES)**

