HABITAT IMPROVEMENT PROGRAM
HIPIII
2015 ANNUAL MONITORING REPORT

Bonneville
POWER ADMINISTRATION

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SUMMARY

This is the third annual monitoring report required under the Habitat Improvement Program III Biological Opinions (HIPIII) (NMFS No# 2013/9724, USFWS 01E0FWOO-2013-F-0199). This report summarizes activities completed in calendar year 2015 and reports on the incidental take resulting from those activities and compares them with previous years.

With the exception of herbicide use, the number of BPA funded projects, scope and complexity remained consistent with previous years activities. BPA has been successful in meeting incidental take criteria. There have been only two exceedances on turbidity which is an improvement over the six exceedances reported last year. There has also been less instances of non-compliance. The trainings over the years and guidance provided from the HIPIII handbook has helped project sponsors and their subcontractors better able to know, understand and take seriously the requirements.

In response to last year's positive feedback, BPA's Environmental Planning and Analysis Group (ECF) has hosted another series of trainings across the basin to ensure compliance with the HIPIII. Once again the response was overly positive. These trainings have provided us with a greater confidence that the HIPIII conservation measures and processes are adequately addressed in the field.

The HIPIII Handbook continues to be refined and has been used as a tool to provide much needed clarifications and guidance. It is continuously updated and reflects the current state of science on restoration standards and practice.

The Restoration Review Team (RRT) has continued provide thorough reviews on the merit, development, execution and anticipated benefit of medium and high risk projects. Technical reviews are facilitated through open communication and cooperation with the project sponsor and interagency coordination has been sought with National Marine Fisheries Service (NMFS) and United States Fish and Wildlife Service (USFWS) on numerous occasions. BPA has continued to raise the bar on the expectations and technical competency on project proposal across the basin, thus increasing the conservation value of our program.

HIPIII PROJECTS AUTHORIZED

During 2015, the HIPIII BOs authorized 97 individual projects (Table 1, FIGURE 1&2) each with multiple activity categories (Work Elements). Figures 1&2 are overlain with USFWS field office and NMFS branch jurisdictions. The red dots represent activities within the **Fish Passage Restoration** and **River, Stream, Floodplain and Wetland** activity categories and are the most likely to involve in-stream work. A majority were low risk (82), 16 were medium risk, and 3 were considered high risk. Each medium and high risk underwent RRT design review and approval.

TABLE 1: HIPIII PROJECT AUTHORIZATIONS 2015

HIP3 NO#	Project Title	Habitat Branch	Field Office	RISK
2015001	Tucannon River Riparian Habitat Projects (PA 22,26, &40)	CRB	Spokane	LOW
2015002	Tucannon River PA-11	CRB	Spokane	LOW
2015003	Umatilla Fish Passage Operations and Maintenance	CRB	La Grande	LOW
2015004	Crooked River/American River Restoration	N Snake	Boise	MED
2015005	John R. Palensky Operations and Maintenance	Willamette	Portland	LOW
2015006	Potlatch River Watershed Restoration	N Snake	NA	LOW
2015007	Couse & Tenmile Creeks Habitat Restoration	S Snake	Eastern WA	LOW
2015008	Asotin Creek Wildlife Mitigation	S Snake	Spokane	LOW
2015009	Lower Clearwater and Potlatch Watershed Improvements	N Snake	NA	LOW
2015010	Lower Clearwater and Potlatch Watershed Improvements	N Snake	NA	LOW
2015011	Nursery Management at Forrest	CRB	La Grande	LOW
2015012	Yakima Klickitat Fisheries Project Operations & Maintenance	CRB	Wenatchee	LOW
2015013	Yakima Basinwide Tributary Passage and Flow	CRB	Wenatchee	LOW
2015014	Yakima Klickitat Fisheries Project Operations & Maintenance	CRB	Wenatchee	LOW
2015015	Yakima Basinwide Tributary Passage and Flow	CRB	Wenatchee	LOW
2015016	Tucannon River PA-15	CRB	Wenatchee	MED
2015017	Tucannon River PA-24	CRB	Wenatchee	MED
2015018	Shillapoo Wildlife Area	WC/LCR	Lacey	LOW
2015019	Fifteen Mile Creek Habitat Improvement	CRB	La Grande	LOW
2015020	Albeni Falls Wildlife Mitigation	NA	Spokane	LOW
2015021	Asotin Creek Enhancement and Restoration	S Snake	Spokane	LOW
2015022	PNNL Temperature Monitoring Below Bonneville Dam	WC/LCR	Lacey	LOW
2015023	Opal and Trout Creek Fish Passage Improvement	CRB	NA	
2015024	Beaver Creek Bridge	CRB	Spokane	LOW
2015025	Sunnyside Wildlife Area	CRB	Wenatchee	LOW
2015026	Klickitat Watershed Enhancement	CRB	Wenatchee	LOW
2015027	Forrest Conservation Area	CRB	La Grande	LOW
2015028	ODFW Operations & Maintenance	Willamette	Portland	LOW
2015029	Hungry Horse Mitigation Habitat Restoration	NA	Helena	LOW
2015030	Salmon Creek Dogleg	CRB	NA	MED
2015031	Bohannon Creek Culvert Replacement	S Snake	Chubbock	LOW

HIP3 NO#	Project Title	Habitat Branch	Field Office	RISK
2015032	Oxbow Conservation Area	CRB	La Grande	LOW
2015033	NE Oregon Precious Lands Wildlife Area	S Snake	La Grande	LOW
2015034	Tualatin River National Wildlife Refuge Additions	Willamette	Portland	LOW
2015035	Umatilla Anadromous Fish Habitat	CRB	La Grande	LOW
2015036	Big Valley South Fish Habitat Enhancement Project	CRB	Wenatchee	LOW
2015037	Logan Valley Wildlife Mitigation	NA	La Grande	LOW
2015038	Grande Ronde Subbasin Restoration Invasive Weed Treatments	CRB	La Grande	LOW
2015039	Albeni Falls Wildlife Mitigation	NA	Spokane	LOW
2015040	Pine Creek Conservation Area	CRB	La Grande	LOW
2015041	Tribal Pacific Lamprey Restoration Plan	WC/LCR	Portland	LOW
2015042	North Fork Habitat Improvement	N Snake	Boise	LOW
2015043	Hungry Horse Mitigation/Flathead Lake Restoration & Research, Monitoring, and Evaluation	NA	Helena	LOW
2015044	Tribal Pacific Lamprey Restoration Plan	WC/LCR	Portland	LOW
2015045	Technical Support for BiOP RM&E	CRB	Wenatchee	LOW
2015046	Furey Lane/ P-13 Projects	S Snake	Chubbock	LOW
2015047	North Fork Habitat Improvement	CRB	La Grande	LOW
2015048	Upper Columbia Project Scale Action Effectiveness Monitoring	CRB	Wenatchee	LOW
2015049	East Branch Wilson Creek - KVFR Diversion	CRB	Wenatchee	LOW
2015050	Methow River Management	CRB	Wenatchee	LOW
2015051	Lapwai Creek Watershed Restoration	N Snake	NA	MED
2015052	Buckmire Slough Restoration Project	WC/LCR	NA	LOW
2015053	Tucannon River Riparian Habitat Projects (PA 23 & 26)	N Snake	Spokane	LOW
2015054	YTAHP - Cowiche Creek Pump Screen -NYCD	CRB	Wenatchee	LOW
2015055	YTAHP - Cherry Creek Tribs - Cooke	CRB	Wenatchee	LOW
2015056	**Kentch Channel Restoration**	**CRB**	**La Grande**	**HIGH**
2015057	John Day Tributary Passage and Flow – Voight Creek	CRB	La Grande	MED
2015058	Snag Boat Bend/Sam Daws Side Channel and Floodplain Restoration	Willamette	Portland	MED
2015059	Wanaket Wildlife Area	CRB	La Grande	LOW
2015060	Isquulktpe Watershed Project	CRB	La Grande	LOW
2015061	Rainwater Wildlife Area	CRB	La Grande	LOW
2015062	Lapwai Creek Anadromous Habitat	N Snake	NA	LOW
2015063	Harkens Lake - Willamette Valley Habitat Restoration	Willamette	Portland	MED
2015064	Wenas Wildlife Area	CRB	Wenatchee	LOW
2015065	Yakima Phase II Fish Screens	CRB	Wenatchee	LOW
2015066	Lower Clearwater and Potlatch Watershed Improvements	N Snake	NA	MED
2015067	Pahsimeroi River Habitat	S Snake	Chubbock	LOW
2015068	Lemhi River Restoration	S Snake	Chubbock	LOW
2015069	**Yankee Fork/West Fork Confluence Project 2015**	**S Snake**	**Chubbock**	**HIGH**
2015070	123 Tower Creek Road	S Snake	Chubbock	LOW
2015071	**Mill Creek Habitat Restoration Project (Phase 2)**	**CRB**	**NA**	**HIGH**
2015072	Hellsgate Big Game Winter Range	CRB	Wenatchee	LOW
2015073	John Day Habitat Enhancement	CRB	La Grande	LOW
2015074	Antoine Creek Roughened Channel	CRB	NA	MED

HIP3 NO#	Project Title	Habitat Branch	Field Office	RISK
2015075	Smith Sill Fish Passage Improvement Project	CRB	La Grande	MED
2015076	Johnson Creek Fish Passage	CRB	NA	MED
2015077	Furey Lane Bridge Installation on the Pahsimeroi River	S Snake	Chubbock	MED
2015078	John Day Tributary Passage and Flow	CRB	La Grande	LOW
2015079	John Day Tributary Passage and Flow	CRB	La Grande	LOW
2015080	YTAHP - Wilson/Naneum/Cherry Assessment	CRB	Wenatchee	LOW
2015081	Lower Columbia Estuary – Food-Web Sampling	WC/LCR	Lacey	LOW
2015082	Rock Creek Fish and Habitat Assessment	CRB	NA	LOW
2015083	CHaMP Habitat Monitoring	CRB	La Grande	LOW
2015084	ODFW Operations & Maintenance	Willamette	Portland	LOW
2015085	CBTWP CTUIR Water Transactions Instream Flow	S Snake	La Grande	LOW
2015086	CBTWP CTUIR Water Transactions Instream Flow	CRB	La Grande	LOW
2015087	Yakima Basin Side Channels	CRB	Wenatchee	LOW
2015088	Cox Creek Culvert Replacement	S Snake	Boise	LOW
2015089	Pine Creek Conservation Area - Beaver Dam Analogs	CRB	La Grande	MED
2015090	Lemhi River Restoration	S Snake	Chubbock	LOW
2015091	Lake Pend Oreille Kokanee Mitigation	CRB	Spokane	LOW
2015092	Hungry Horse Mitigation Habitat Restoration	NA	Helena	LOW
2015093	Ninemile Creek Project	CRB	NA	MED
2015094	Lower Clearwater and Potlatch Watershed Improvements	N Snake	NA	LOW
2015095	Potlatch River Watershed Restoration	N Snake	NA	LOW
2015097	John Day Habitat Enhancement	CRB	La Grande	LOW

2015067 McCoy Creek culvert replacement (Before)

2015067 McCoy Creek culvert replacement (after)

2015 HIPIII PROJECT LOCATIONS (USFWS FO)

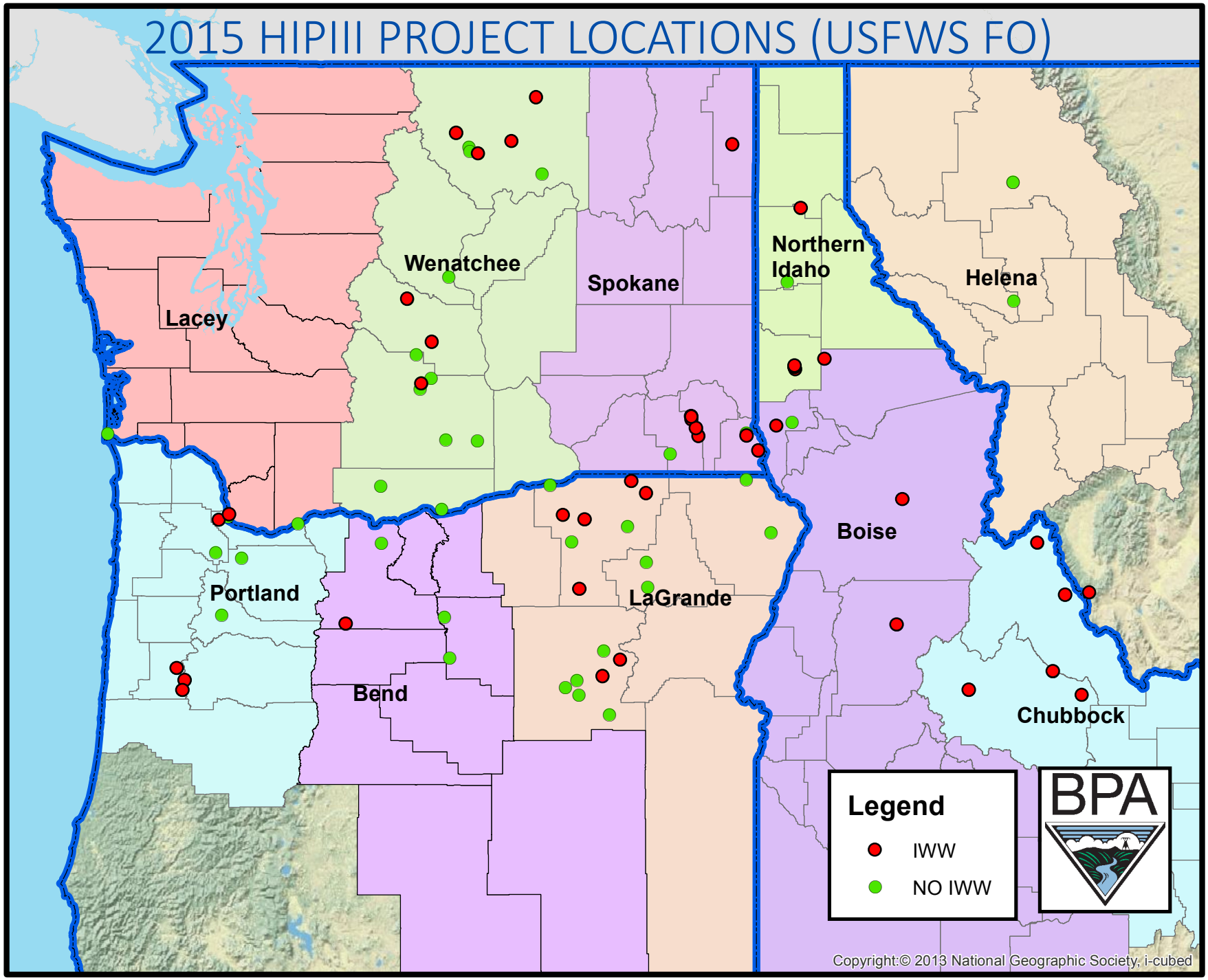
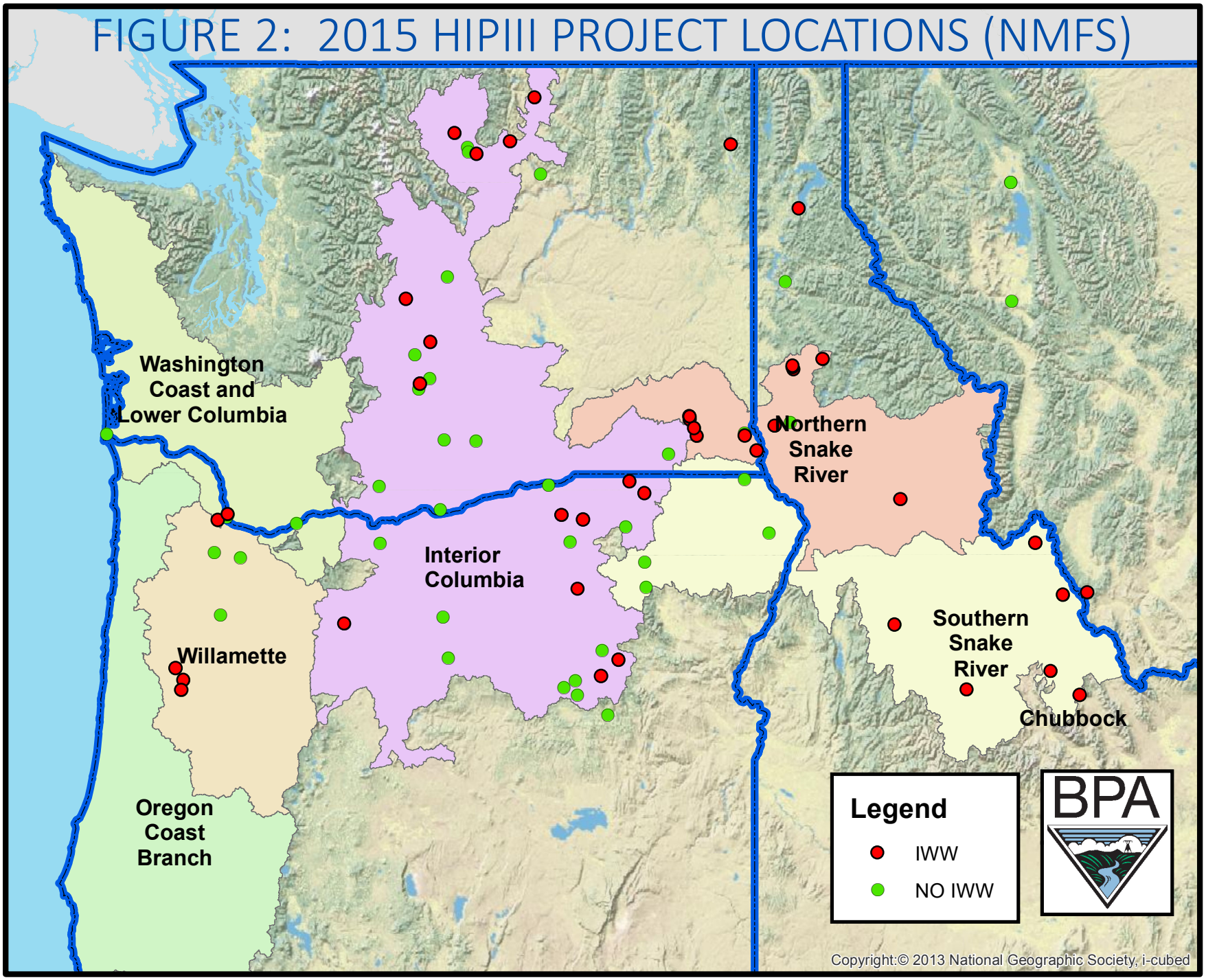


FIGURE 2: 2015 HIPIII PROJECT LOCATIONS (NMFS)



PROJECT ACTIVITIES

Within each individual projects there could be few or many activity categories. BPA generally lumps each set of activity categories by location and project sponsor, with the exception of herbicides, surveys, and O&M activities which could have multiple locations lumped by program.

TABLE 2: PROJECT ACTIVITIES

Category	Subcategory	ACTIVITIES	2013	2014	2015
1. Fish Passage Restoration					
	Profile Discontinuities				
		a. Dams, Water Control or Legacy Structure Removal.	1	2	3
		b. Consolidate, or Replace Existing Irrigation Diversions.	3	3	1
		c. Headcut and Grade Stabilization.	3	6	9
		d. Low Flow Consolidation.	0	0	0
		e. Providing Fish Passage at an Existing Facility.	2	6	4
	Transportation Infrastructure				
		f. Bridge and Culvert Removal or Replacement.	8	11	9
		g. Bridge and Culvert Maintenance.	0	0	1
		h. Installation of Fords.	2	0	2
2. River, Stream, Floodplain, and Wetland Restoration.					
		a. Improve Secondary Channel and Wetland Habitats.	6	11	8
		b. Set-back or Removal of Existing, Berms, Dikes, and Levees.	2	7	10
		c. Protect Streambanks Using Bioengineering Methods.	4	8	10
		d. Install Habitat-Forming Natural Material Instream Structures	11	20	15
		e. Riparian Vegetation Planting.	19	30	32
		f. Channel Reconstruction.	2	4	3
3. Invasive and Non-Native Plant Control.					
		a. Manage Vegetation using Physical Controls.	18	32	26
		b. Manage Vegetation using Herbicides.	39	45	39
4. Piling Removal.					
		Pile Removal	0	0	0
5. Road and Trail Erosion Control, Maintenance, and Decommissioning.					
		a. Maintain Roads.	2	4	3
		b. Decommission Roads.	0	3	0
6. In-channel Nutrient Enhancement.					
		Nutrient Enhancement.	0	0	0
7. Irrigation and Water Delivery/Management Actions.					
		a. Convert Delivery System to Drip or Sprinkler Irrigation.	3	2	2
		b. Convert Water Conveyance from Open Ditch to Pipeline or	4	5	1

Category	Subcategory	ACTIVITIES	2013	2014	2015
		c. Convert from Instream Diversions to Groundwater Wells for	0	0	0
		d. Install or Replace Return Flow Cooling Systems.	1	0	0
		e. Install Irrigation Water Siphon Beneath Waterway.	2	0	0
		f. Livestock Watering Facilities.	4	8	5
		g. Install New or Upgrade/Maintain Existing Fish Screens.	3	4	5
8. Fisheries, Hydrologic, and Geomorphologic Surveys.					
		Surveys	18	25	24
9. Special Actions (for Terrestrial Species).					
		a. Install/develop Wildlife Structures.	0	0	0
		b. Fencing construction for Livestock Control	1	5	7
		c. Implement Erosion Control Practices.	0	3	2
		d. Plant Vegetation.	2	6	7
		e. Tree Removal for LW Projects.	0	3	1

2015001 Tucannon River Large Wood Structure

INCIDENTAL TAKE REPORTING

The NMFS and USFWS BOs defined four categories of incidental take based on the likelihood of adverse effects to ESA-listed species.

1. Short-term impacts to water quality (e.g., suspended sediment, temperature, dissolved oxygen demand and contaminants).
2. Short-term impacts to water quality (e.g., due to application of chemical herbicides).
3. Short-term decreases in function of physical habitat features (e.g. floodplain connectivity, Natural cover, riparian vegetation, instream flow, stream substrate, space, and safe passage conditions).
4. Juvenile fish handling and dewatering during work area isolation.

Short-term impacts to water quality (suspended sediment, temperature, etc.) and physical habitat features.

A further threshold for reinitiating consultation is a visible increase in suspended sediment. In 2015 there has been only 2 reported instances where turbidity was elevated above background for more than 2 monitoring intervals. In all instances the work stopped, additional conservation measures implemented and NMFS was contacted as soon as BPA was notified.

TABLE 3: TURBIDITY EXCEEDANCES

HIPIII NO#	PROJECT
2015056	Kentch Channel Restoration & Floodplain Activation.
EXPLANATION:	**Channel Reconstruction.** Turbidity exceedances were caused mainly during the fill operation of the old channel. Contractor utilized silt curtains below the fill operation as well as hay bales to collect any further sediment. Levels started to decrease once the BMPs were applied. BPA further discussed with the project sponsor that more efficient sediment control efforts could have been applied such as pumping out the sludge before it re - entered the new channel to minimize the turbidity downstream and timing concurrent in-stream work to better manage turbidity pulses.

HIPIII NO#	PROJECT
2015075	Smith Sill Fish Passage Improvement Project
EXPLANATION:	**Headcut and Grade Stabilization.** The project was intended to reconstruct a riffle below the Smith Sill which was at risk of eroding into a fish passage problem. The work was done by constructing a temporary diversion dam and diverting the river around the riffle. During project construction water was infiltrating through the diversion dam causing elevated turbidity downstream. The proponent implemented BMPs, including sealing the diversion and ordering additional pumps to dewater the project area. Turbidity decreased after two monitoring intervals with the implementation of these BMPs. Finally, when removing the diversion dam a large pulse of turbidity occurred which calmed down after 2 monitoring intervals.

Short-term water quality impacts from chemical herbicide application.

The analysis in the BOs affirm that application of chemical herbicides will result in short-term degradation of water quality which will cause injury to fish in the form of sublethal adverse physiological effects. Up to 1,000 total riparian acres may be treated in a calendar year under this programmatic consultation. In 2015, the amount of riparian acres treated increased substantially mainly due to Wildlife Areas of which BPA funds the acquisition and maintenance of the property such as the Tualatin River National Wildlife Refuge and the Albeni Falls Wildlife Area.

TABLE 4: ACRES TREATED WITH HERBICIDE

	RIPARIAN	UPLAND
2013	409	2482
2014	449	8282
2015	715	10710

Short-term decreases in function of physical habitat features.

This was defined as the total length of stream reach that is modified by construction each year. 90 projects per year that include near or in-water construction is a threshold for reinitiating consultation. This has been met with 41 projects that required near or in-water construction in 2015. These sites are represented as the red dots on Figures 1 & 2.

TABLE 5: No# HIPIII PROJECTS THAT INCLUDE NEAR OR IN_WATER WORK

2013	2014	2015
35	45	41

Juvenile fish handling during dewatering and work area isolation.

Capture and/or mortality of ESA-listed salmonids during work area isolation is limited to 7500 captured and 375 injured or killed per calendar year. This is further broken down by recovery domain. BPA has taken less fish than last year during work area isolation activities. It is worth noting that scope and complexity of BPA funded projects has been steadily increasing over the years thus requiring greater efforts at work area isolation (dewatering reaches for channel reconstruction).

TABLE 6: INCIDENTAL TAKE DUE TO FISH HANDLING

SPECIES	TAKE CATEGORY	ALLOWABLE LIMITS	2013 ACTUAL TAKE	2014 ACTUAL TAKE	2015 ACTUAL TAKE
Interior Columbia	Handled	5925	841	3593	3541
	Mortality	296	12	8	59
Oregon Coast	Handled	375	0	0	0
	Mortality	19	0	0	0
	Handled	1200	0	0	0
Willamette	Mortality	60	0	0	0
	Handled	250	0	14	29
Bull Trout	Mortality	13	0	0	0

2015001 Tucannon 2ndary Channel and LW placement

APPROVED VARIANCES

BPA requested 23 variances with the most common being inwater work window extensions (4) and use of chain bolos as structural connections (4). Most of the variances types are consistent with the variances requested for previous years.

TABLE 7: APPROVED VARIANCES and RATIONALE

HIPIII NO#	PROJECT	RATIONALE
2015002	Tucannon River PA-11	Structural Connections (chain bolos)
2015004	Crooked River/American River Restoration	Culvert Span < 1.5 BFW, IWWW Extension
2015016	Tucannon River PA-15	Structural Connections (chain bolos)
2015017	Tucannon River PA-24	Structural Connections (chain bolos)
2015018	Shillapoo Wildlife Area	Use of Adjuvant(Compadre)
2015022	PNNL Temperature Monitoring Below Bonneville Dam	IWWW Extension
2015024	Beaver Creek Bridge	Fish Passage Exemption
2015025	Sunnyside Wildlife Area	Use of Herbicide (Flurozypr) for Resistant Upland Kochia
2015036	Big Valley South Fish Habitat Enhancement Project	Allow refueling activities and staging near within the 150' buffer & high number of wet-crossings.
2015039	Albeni Falls Wildlife Mitigation	Place of 1,500 cy spawning gravel rock in Lake Pend Oreille.
2015043	Hungry Horse Mitigation/Flathead Lake Restoration & RME Evaluation	Use of Herbicide (Flurozypr) for Resistant Upland Kochia
2015052	Buckmire Slough Restoration Project	Bridge Criteria not applicable in Tidal System.
2015053	Tucannon River Riparian Habitat Projects (PA 23 & 26)	Structural Connections (chain bolos)
2015056	Kentch Channel Restoration Floodplain Activation, Lampson site Repair, and	Staging Area <150 feet, temporary stream crossings, and non-isolation of work areas.
2015058	Snag Boat Bend/Sam Daws Side Channel and Floodplain Restoration	Box Culvert width <1.5 bfw in 2ndary channel. Use of angular rock for hardened crossing.
2015063	Harkens Lake - Willamette Valley Habitat Restoration	Box Culvert width <1.5 bfw in 2ndary channel. Use of angular rock for hardened crossing.

2015064	Wenas Wildlife Area	Use of Herbicide (Flurozypr) for Resistant Upland species.
2015067	Pahsimeroi River Habitat	IWWW Extension
2015068	Lemhi River Restoration	IWWW Extension
2015075	Smith Sill Fish Passage Improvement Project	Allow electrofishing of bull trout after August 15
2015076	Johnson Creek Fish Passage	Installation of Culvert using the hydraulic method criteria instead of the stream simulation.
2015089	Pine Creek Conservation Area - Beaver Dam Analogs	IWWW Extension
2015091	Lake Pend Oreille Kokanee Mitigation	Placement of >100 cubic yards of spawning gravel to benefit kokanee Oreille.

2015068 Eighteen Mile Creek (Before)

2015068 Eightteen Mile Creek (After)

NON-COMPLIANCE

There only 2 cases of non-compliance, much less than the 6 cases last year. We attribute this to the numerous HIPIII trainings given across the basin. In each case BPA took corrective measures to inform the project sponsor of the issue. In the case of 2015087 we realized there were no conservation measures governing the use of piles. We then crafted criteria to prevent such an instance from occurring again.

TABLE 8: NON-COMPLIANCE PROJECTS

HIPIII NO#	PROJECT
2015021	**Asotin Creek Enhancement and Restoration**
EXPLANATION:	Project sponsor used 4 non-permitted herbicides (Broromoxynil, Pyrasulfotole, Thiencarbazone-methyl, and Floxypyr) and 2 non-allowed adjuvants (Spreader 90 & Blue Dye) in mixtures of over 4 chemicals. BPA confirmed that these chemicals were applied in upland areas and that there was no runoff/drift to surface waters. The project sponsor was notified of the rules and was asked to apply for a variance or consult individually next year.

HIPIII NO#	PROJECT
2015087	**Yakima Basin Side Channels**
EXPLANATION:	Proposed project was for the placement of unanchored log jams in the stream channel placed via cable yarder. Pilings were to be driven into the bank using a 100-class tracked excavator, to enhance floodplain roughness and to trap material during floods. However, when BPA received the PCF we learned that the project sponsor used a steel H-pile to pre-drill a bore to speed efficiency of pile driving. We informed the project sponsor that this was not a covered activity under the HIPIII and created criteria regarding pile driving restricting the use of steel piles, number of piles, methodology, and stream type.

2015075 Smith Sill Riffle Widening Work Area Isolation

HIPIII TRAINING

In 2015, BPA's environmental compliance staff offered 11 training sessions throughout the Columbia River Basin to aid project sponsors and their subcontractors in understanding the background and procedures of the HIPIII and RRT process. These training sessions were met with attendance and feedback beyond our expectations. We followed up that demand with more offerings for environmental compliance training in 2016.

In 2016 BPA's environmental compliance staff hosted four trainings across the basin. These training were similar to last years, but expanded to include updates as a result of changes during the past year. We provided additional focus on the inclusion of environmental protection requirements in sub-contracts, introduction of conservation measures, RRT processes, requirements for RRT review and passed out newly updated HIPIII handbooks.

TABLE 9: 2016 TRAINING SESSIONS

CITIES	DATE	ATTENDANCE
The Dalles, OR	3/2/16	71
Coeur D' Alene, ID	3/3/16	32
Boise, ID	3/8/16	29
Wenatchee, WA	3/9/16	55

2015004 Elk Creek Culvert Replace (Before)

2015004 Elk Creek Culvert Replace (After)

HERBICIDE USE

Herbicide use continues to be the most widely used project activity category under the HIPIII. This is due to the numerous wildlife mitigation areas that BPA purchases and are managed under contract by various entities. There has been an increased interest in using herbicides not covered under the HIPIII due to herbicide resistant weeds and applications within the estuary.

This is the first year in which BPA approached the annual 1,000 riparian acre limit. Through purchases, leases, and acquisitions, BPA has increased the amount of land that needs to be managed for invasive species. We can expect this number to increase.

TABLE 10: PROJECTS WITH HERBICIDE USAGE

HIPIII NO#	PROJECT	RIPARIAN	UPLAND
2015003	Umatilla Fish Passage O&M	8	0
2015005	John R. Palensky O&M	5	5
2015008	Asotin Creek Wildlife Mitigation	0	341
2015011	Nursery Management at Forrest	0	9
2015012	Yakima Klickitat Fisheries Project O&M	7	17
2015014	Yakima Klickitat Fisheries O&M	9	0
2015018	Shillapoo Wildlife Area	20	981
2015019	Fifteen Mile Creek Habitat Improvement	54.42	13.6
2015020	Albeni Falls Wildlife Mitigation	133	0
2015025	Sunnyside Wildlife Area	0	1133
2015026	Klickitat Watershed Enhancement	4.3	0
2015027	Forrest Conservation Area	0	111
2015028	ODFW O&M	25	581
2015029	Hungry Horse Mitigation Habitat Restoration	12	312
2015032	Oxbow Conservation Area	0	67
2015033	NE Oregon Precious Lands Wildlife Area	34	405
2015034	Tualatin River National Wildlife Refuge Additions	100	112
2015035	Umatilla Anadromous Fish Habitat	2.3	33.45
2015037	Logan Valley Wildlife Mitigation	0	1
2015038	Grande Ronde Subbasin Restoration Weed Treatments	2	0
2015040	Pine Creek Conservation Area	25	860
2015043	Hungry Horse Mitigation/Flathead Lake Restoration & RM&E	7.5	266.5
2015047	North Fork Habitat Improvement	56.5	0
2015049	East Branch Wilson Creek - KVFR Diversion	NA	NA
2015050	Methow River Management	2.5	4
2015051	Lapwai Creek Watershed Restoration	11.5	0
2015059	Wanaket Wildlife Area	0	120.6
2015060	Isquulktpe Watershed Project	0	18.2
2015061	Rainwater Wildlife Area	20	515
2015062	Lapwai Creek Anadromous Habitat	11.428	9.17
2015064	Wenas Wildlife Area	10.4	956
2015065	Yakima Phase II Fish Screens	1	0

2015072	Hellsgate Big Game Winter Range	0	3990
2015073	John Day Habitat Enhancement	6	3
2015082	Rock Creek Fish and Habitat Assessment	0	0.5
2015087	Yakima Basin Side Channels	111	45
2015090	Lemhi River Restoration	3.5	62
2015092	Hungry Horse Mitigation Habitat Restoration	27	243

2015069 Yankee Fork During

2015069 Yankee Fork After

RESTORATION REVIEW TEAM

The RRT continues to provide a comprehensive functional and technical review on all medium and high risk projects. Functional review is done by BPA staff who review the project for adherence to HIPIII criteria and coordinate information and collaboration amongst project partners. The RRT technical review provides an internal point of view on the merit, development, execution and anticipated benefit of med-high risk projects. All reviews are facilitated through open communication and cooperation with the project sponsor and interagency coordination with the Services.

The RRT has further defined and solidified their role in project review and approval. Project sponsors and other federal partners have begun to embrace the RRT review and fold it in their existing processes. We continuously affirm that the RRT is there to help not hinder project development and early involvement is the key.

TABLE 11: RRT REVIEW WORKLOAD

	FY13	FY14	FY15	FY16	Currently Under Review
Medium Risk	4	14	24	7	9
High Risk	2	6	2	1	14

This is the current contact list for the RRT. BPA is in the process of hiring another hydraulic engineer.

- Restoration Review Team Lead:
  - Dan Gambetta (503.230.3493)
- Team Members:
  - Jesse Wilson (503.230.4506)
  - Michelle Guay (503.230.3459)
  - Israel Duran (503.230.3967)
  - Jenna Peterson (503.230.3018)
  - Steve Gagnon (503.230.3375)
  - Brenda Aguirre (503.230.5928)
- Technical Team:
  - Sean Welch (503.230.7691)
  - Doug Knapp (TBA)

ADDITIONAL CRITERIA

Another role of the RRT is to provide updates and clarifications of the USFWS/NMFS HIP III BOs to all users to ensure consistent use, and to resolve inconsistencies and obtain clarification from the Services when needed. All updates and clarifications are communicated via the most current version of the HIPIII handbook.

To this end the RRT has drafted conservation measures, often in concert with NMFS staff biologists and integrated them into the HIPIII Handbook. Every conservation measure either provides more clarity to ambiguity or makes the proposed action more stringent and conservation minded.

The following items were added to the HIPIII Handbook.

1. Staged Rewatering Plan (pg 18).
2. Treated Wood Restrictions (pg 10, 24, 29 & 32).
3. Streambed Simulation Criteria (pg 31)
4. Bridge Scour Prism Guidance (pg 31)
5. Guidance for calculating General Scour elevations (pg 33)
6. 2ndary Channel Excavation Guidance (pg 40)
7. Restrictions on use of Streambank Stabilization Category (pg 43)
8. Restrictions on use of piles (in development).
9. Stream Crossing Guidelines (in development).

Overall, BPA expects that these additional criteria shall improve conservation under the HIPIII program and make the program more efficient or more accountable.

2015042 North Fork Habitat Improvement (Large wood Structures)

THE HIPIII APPROVAL PROCESS

START

1) **Sponsor** provides conceptual designs to **EC Lead**.

2) **EC Lead** makes **Risk Determination**.
   a) If **Low** Risk, the **EC Lead** provides to **Sponsor** (then skip to step 7):
      i) Conservation Measures Checklist or CAD file.
      ii) HIPIII Project Notification Form (PNF, Page 72).
   b) If **Med/High** Risk, the **EC Lead** provides to **Sponsor**:
      i) Conservation Measures Checklist or CAD file.
      ii) General Project and Data Summary Requirements (GPDSR, Page 66).
      iii) HIPIII Project Notification Form (PNF).

3) **Sponsor** provides draft GPDSR and design plans to EC Lead.

4) **EC Lead** submits project to **RRT**.

5) **RRT Process** begins (once information requirements are complete).
   a) **RRT** Team member is assigned.
   b) Review schedule is determined (how many review junctures).
   c) Interagency Participation is solicited (for **High** risk projects).
   d) Site visit scheduled (if necessary).
   e) **RRT** conducts review at specified review junctures (15, 30, 80%):
      i) Functional review (for **Med/High** risk projects).
      ii) Technical review (for **Med/High** risk projects).
      iii) Interagency review (for **High** risk projects).
   f) **RRT** shall compile and submit comments from review, comments shall be either:
      i) Clarifications.
      ii) Recommendations.
      iii) Requirements.
   g) **Sponsor** addresses comments and resubmits design documentation (if necessary).
   h) **RRT** approves design:
      i) If **Med** Risk RRT member sends approval email to EC Lead.
      ii) If **High** Risk RRT member solicits final approval from **NMFS** branch chief and/or **USFWS** field office supervisor.

6) **RRT** review is complete.

7) **EC Lead** or sponsor gets **NMFS** Hydro approval (where needed, see Page 78 in HIPIII Handbook). This can be concurrent with **RRT** review.

8) **Sponsor** submits Final Designs and PNF to **EC lead**.

FINISH

9) EC lead submits completed PNF to Services (NMFS/USFWS).

10) HIPIII coverage is complete.

DISCUSSION TOPICS

Utilizing HIPIII Coverage on multiple species.

- One species out of 10 is not covered under HIPIII, then do we have to go individual consultation on all 10 species?

State Programs for Fish Screens

- ODFW currently lacks coverage.
- Ongoing discussion for using HIPIII.
- HIPIII has an existing structure and reporting in place.

Juniper Removal

- Current use of vegetation management.
- Tribes plan large scale removal (10,000 acres) in 5 years.
- Small window makes logistics extremely difficult.

Adult Take

- Larger projects that would have progressed under HIPIII have been stopped and went individual consultation, which halts RRT design review.
- Large scale, multi phase & multi year projects may be a better fit for the programmatic because there will be an annual review and approval. As opposed to a BO being written for a 5 year project at 30% design (example CC44).

Juvenile Fish Numbers

- Slowly starting to edge up and push against the limits. Very patchy distribution of steelhead. May want to consider revising numbers in HIPIV.

Streak Horned Lark

- Take Coverage not provided under HIPIII.
- BPA funds ODFW to purchase numerous properties in Willamette Valley with future potential habitat for Streak Horned Lark.

Herbicide Use in Estuarine and Tidal Wetlands

- HIPIII Coverage not available.
- Project sponsors must apply in wetlands, especially throughout the estuary.
- Refer to proposal.

Spotted Owl

- Take Coverage not provided under HIPIII.
- BPA needs to helicopter in large wood into remote locations.