

Agriculture Irrigation Market Study Opportunities





KEY AREAS OF OPPORTUNITY



RESEARCH ACTIVITIES



Agenda



Project Goals

1

Characterize current state of irrigation market



Review BPA's current agricultural program

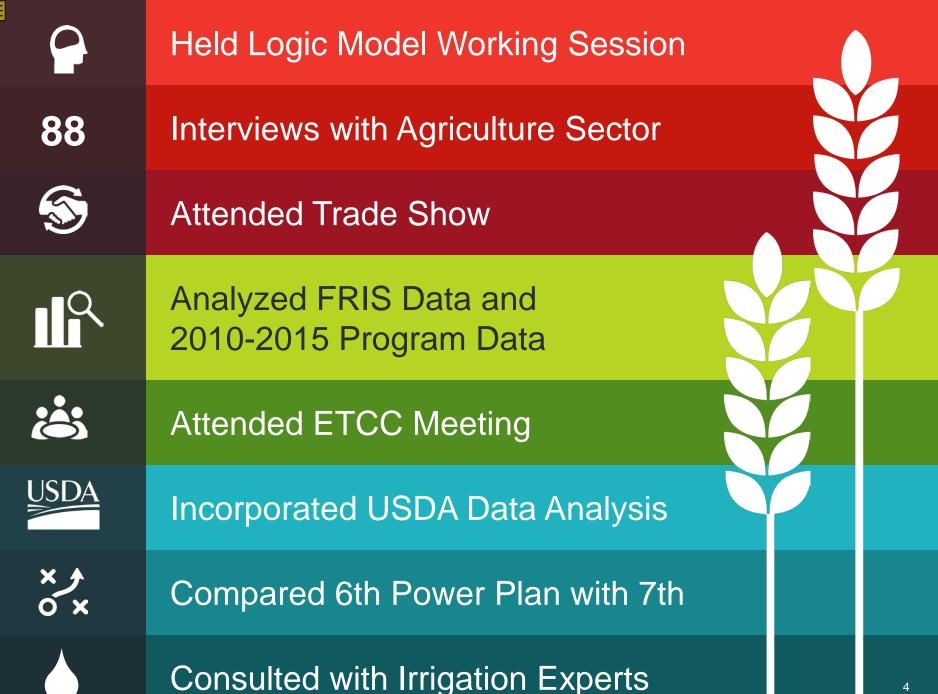


Identify areas of opportunity for irrigation efficiency



Estimate momentum savings











What Are the Key Areas of Opportunity?





AND

TECHNOLOGIES









AND

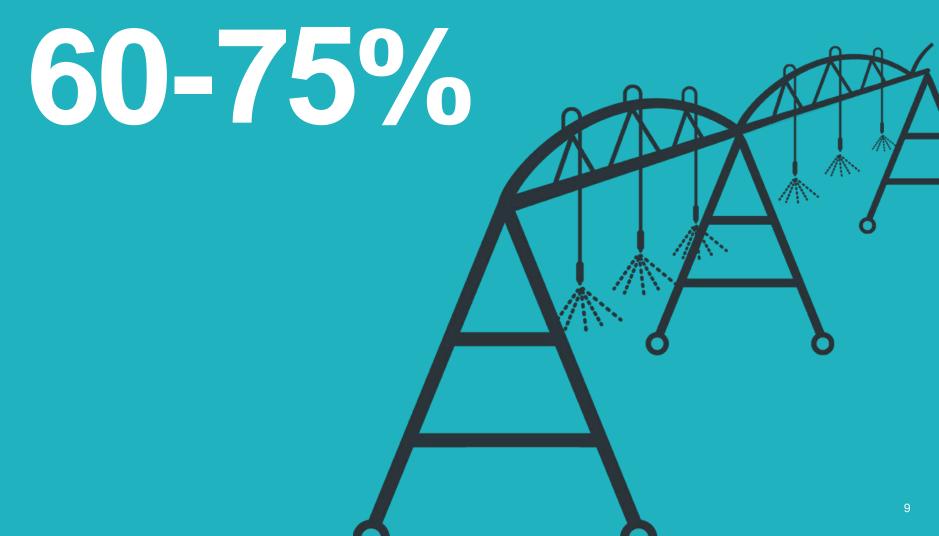
TECHNOLOGIES



Focus on irrigation systems as a whole, rather than just individual components.

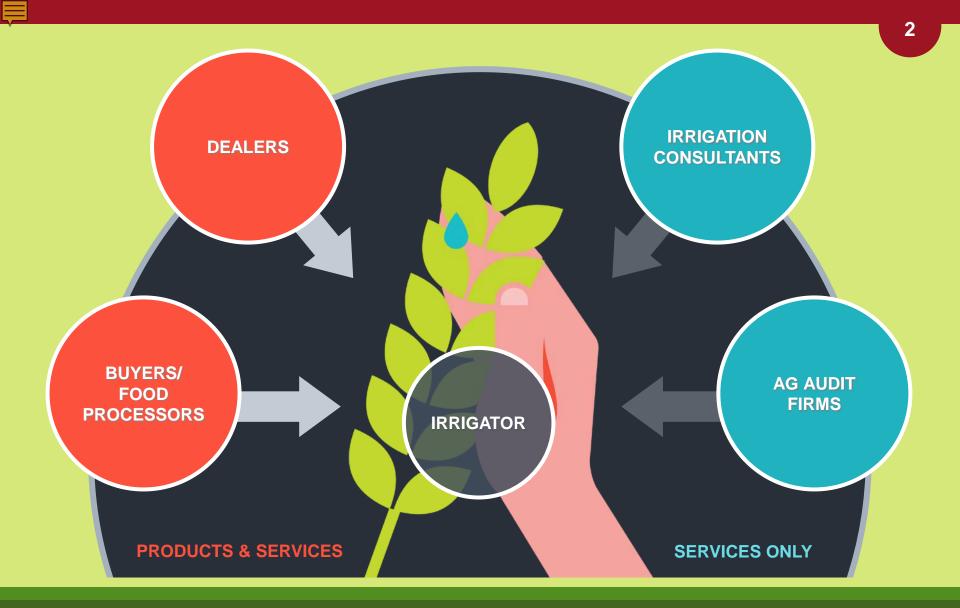


Most sprinkler replacements happen as a package

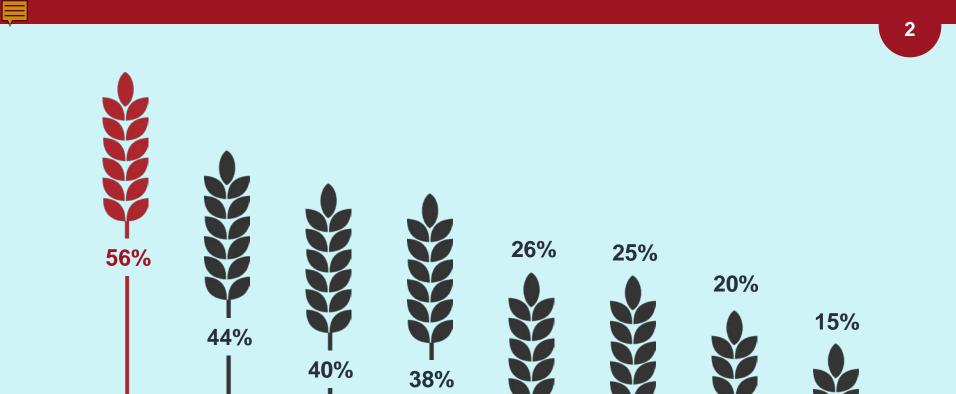




Engage influencers in a strategic and holistic way.



Influencers



Irrigation
Equipment
Dealers

Private
Specialists/
Consultants

Neighboring Farmers

Extension Agents or University Specialists Electronic Information Services

n NRCS, Local Conservation District, Fed/ State Agency District or Water Supplier

Media Reports or in the Press

Irrigator Information Comes from Dealers















Five regions in North America have the ideal combination of soil and climate for perfect potatoes.



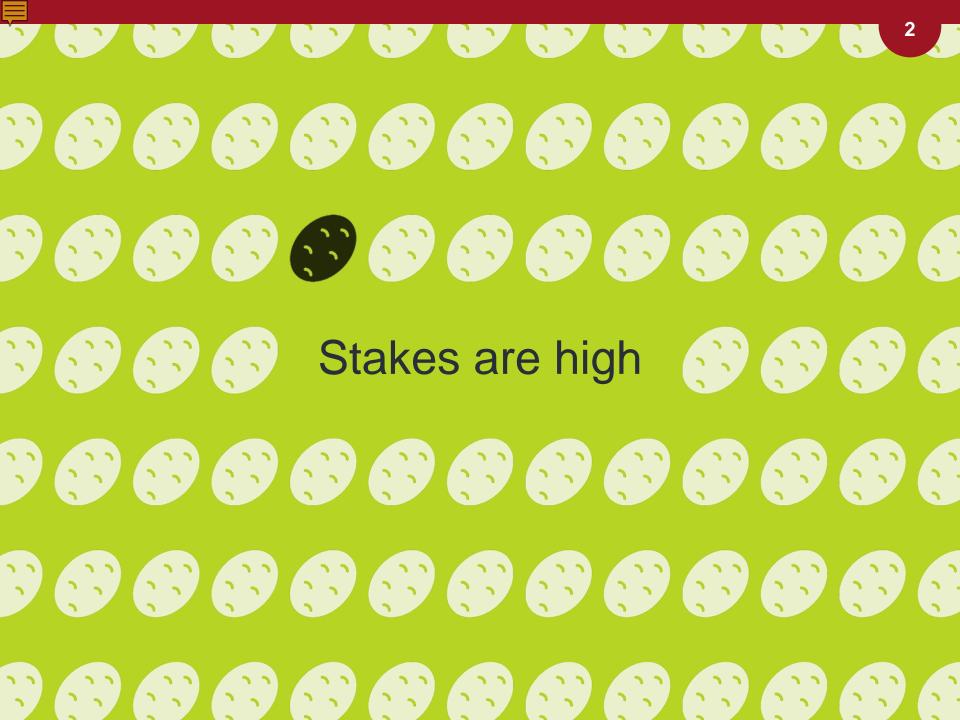
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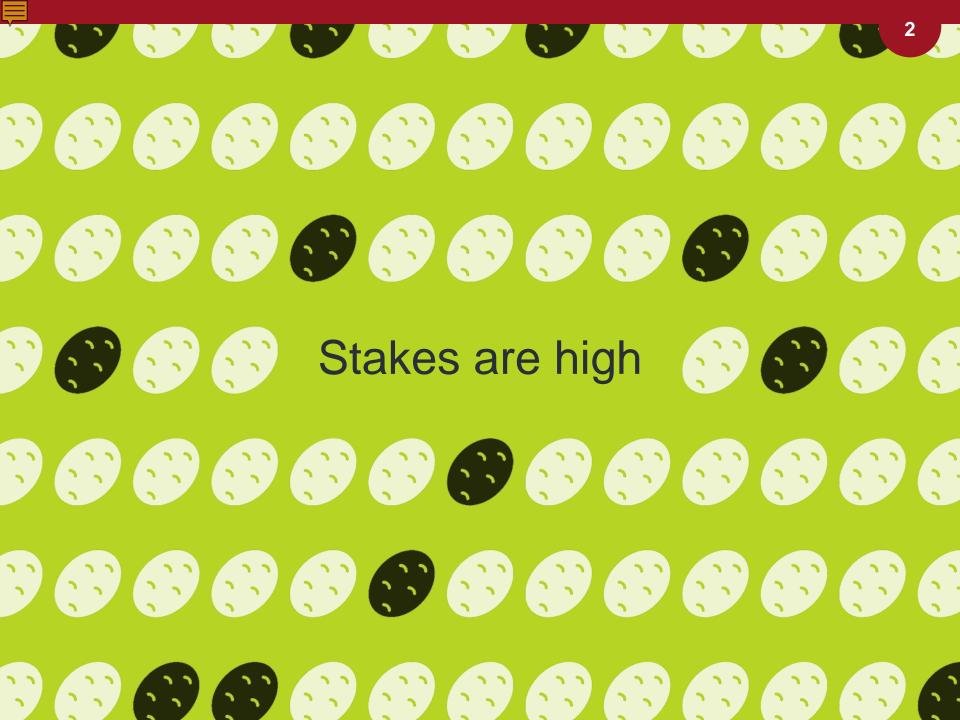




180,000 acres

Potato crop acres in the Columbia River Basin









Partnership with the Northwest Food Processors Association?





How much work is this?



Talk to growers about what matters to them. Then, position them to talk to each other.



Communicate savings through:

Case studies

Documentaries

Forums

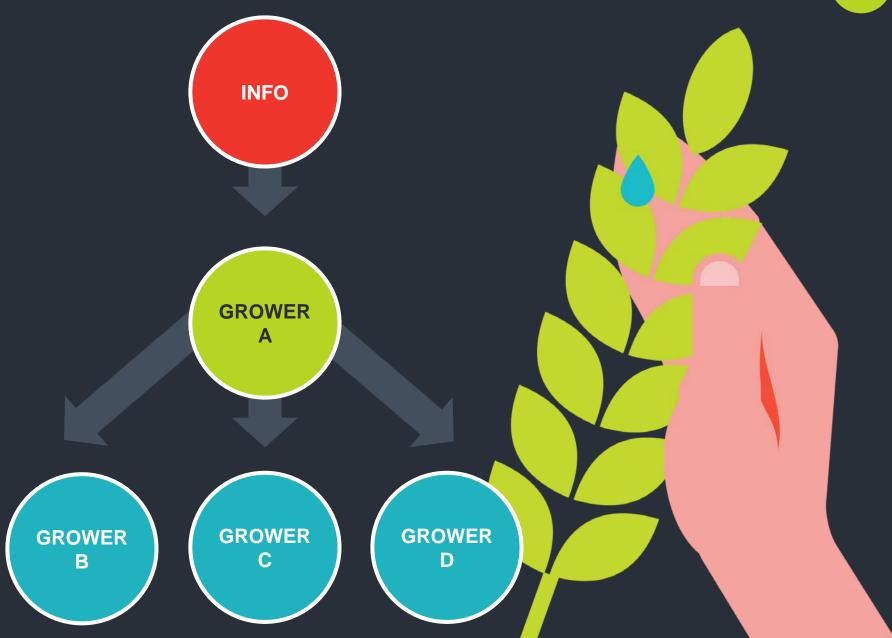
Farm tours

Dinners

Workshops











AND

TECHNOLOGIES



Promote the next generation of SIS



Strategy to apply only the amount of water to the field that the crop needs Columbia River Basin BPA fields

27% SIS

% of fields in sample of fields



We Are in Ag 3.0



Controls as a Potential Area of Opportunity

BPA Staff

Utility Staff

Dealers

Irrigation Consultants

Pivot Manufacturer

Controls Manufacturer

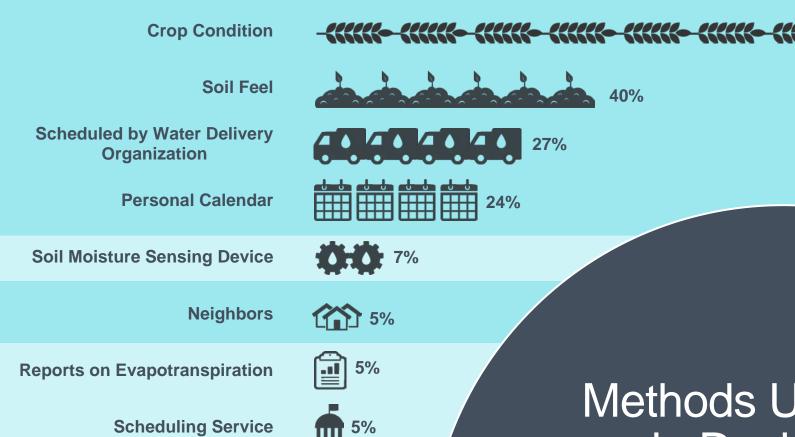
Office Representative



Scheduling Service

Plant Moisture Sensing Device

Computer Simulation Models



1%

1%

Methods Used in Deciding When to Irrigate





Data Processing Companies



Precision Ag Irrigation Leadership (PAIL) Project



Get pumped about motors, pumps, and VFDs.









Consider a program for LESA and LEPA based on study results.



Only 1-2% of center pivot packages have outlet spacing designed for LESA/LEPA.

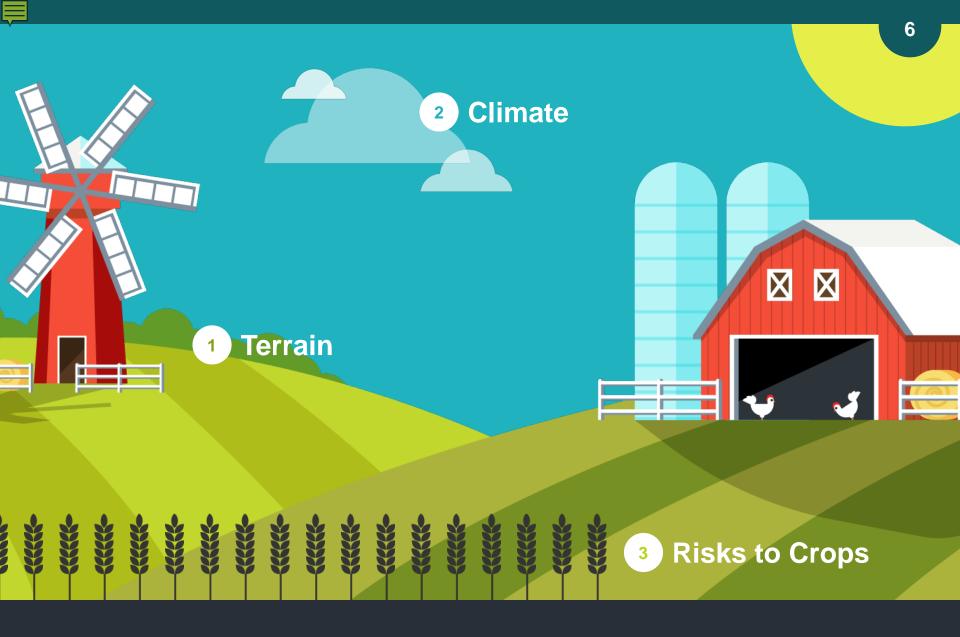
As heard at the Irrigation Association Trade Show



of the agricultural cumulate technically achievable savings in 2035 in the 7th Power Plan is for LESA

of the agricultural cumulative





Perceived Barriers to LESA/LEPA





In Summary





AND

TECHNOLOGIES



Focus on the irrigation system as a whole, rather than individual components





Engage influencers in a strategic and holistic way





Talk to growers about what matters to them, then position growers to talk to each other









Promote the next generation of SIS





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