

# Kootenai River Habitat Restoration Program

## Bonniers Ferry Islands and Straight Reach Projects Update



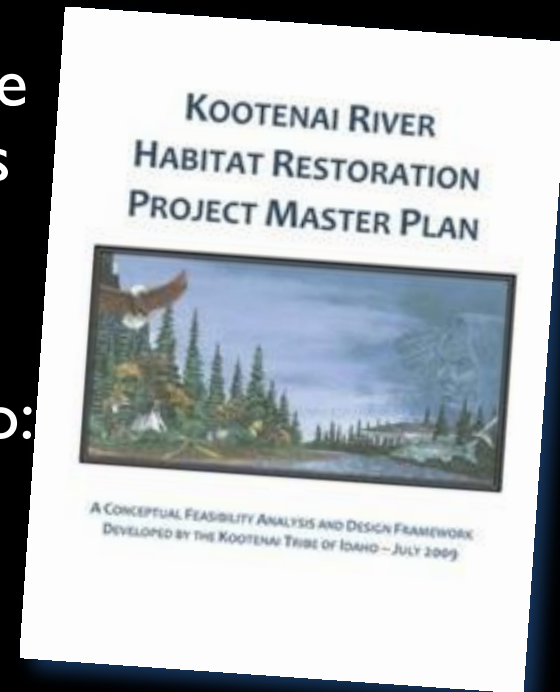
KVRI Briefing  
July 18, 2016



# KRHRP Master Plan

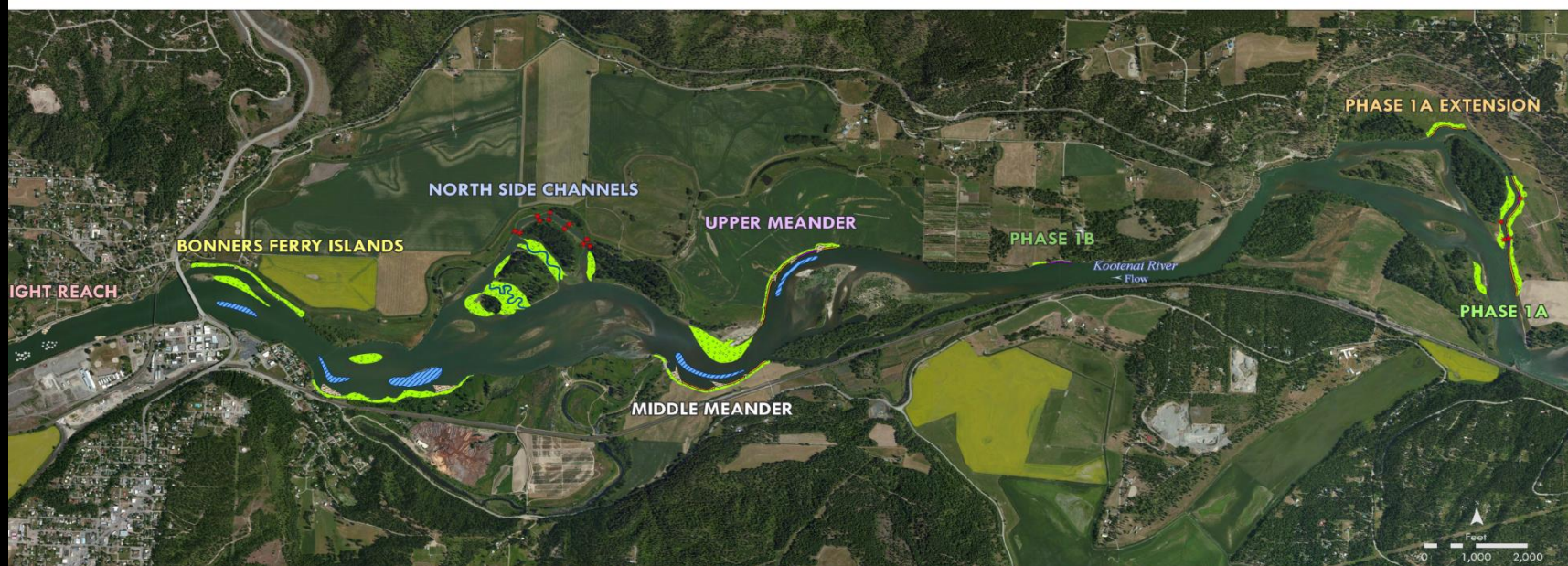
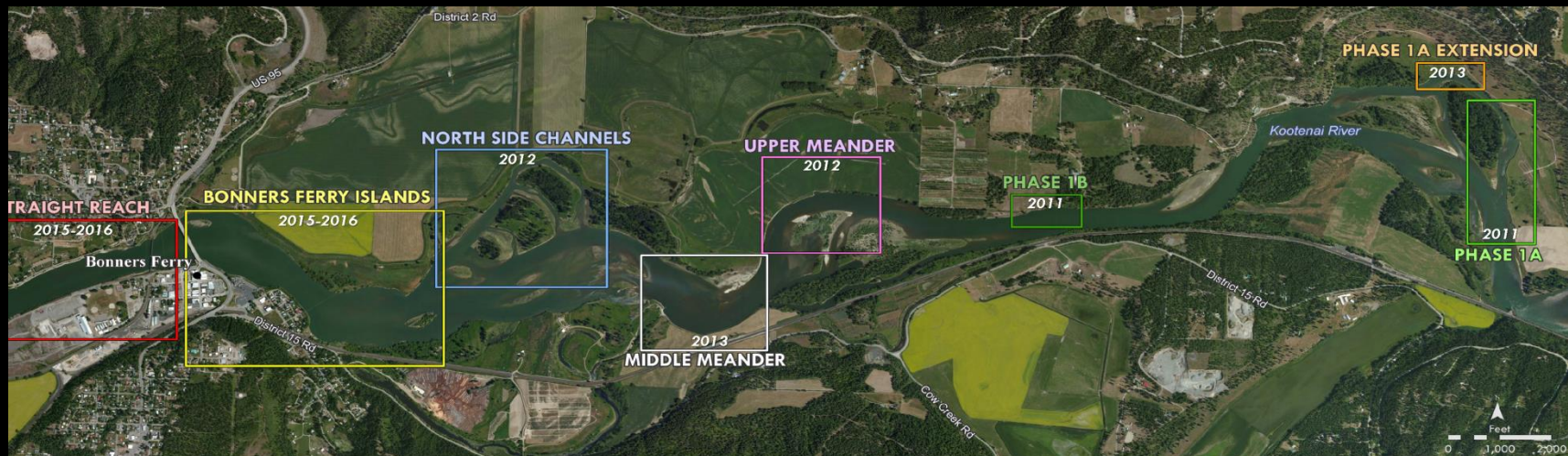
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1. **Overarching framework for large-scale restoration**
2. Focus on dynamic river processes & ecosystem functions instead of prescriptive approach to single life stage of one species restoration actions
3. **Synthesis of available data & analysis**
4. Goals to address limiting factors related to:
  - Morphology
  - Riparian Vegetation
  - Aquatic Habitat
  - River Management & stewardship
5. **Toolbox of restoration treatments to address limiting factors**





# KRHRP Projects 2011-2016



# Major Types of Treatments Implemented 2011-2016

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1. ***Pool forming structures & pool creation or enhancement*** to encourage Kootenai sturgeon to migrate to upstream habitat & to provide holding habitat for sturgeon, burbot & other native fish
2. ***In river & bank structures*** to create more diverse & complex habitats for sturgeon & other native fish
3. ***Side channel reconnection & floodplain creation or enhancement*** to enhance the food web & provide habitat for juvenile Kootenai sturgeon & other native fish
4. ***Riparian enhancement*** (& riparian buffer fencing) to enhance the food web & provide cover for native fish



# Bonniers Ferry Islands Project 2015-2016



## RESTORATION TREATMENTS

 Bank grading & revegetation

 Island construction

 Large wood bank structure

 Pool forming structure

 Pool creation

 0 250 500 750 1,000 Feet



Imagery: Low flow aerial photos, October 2011



















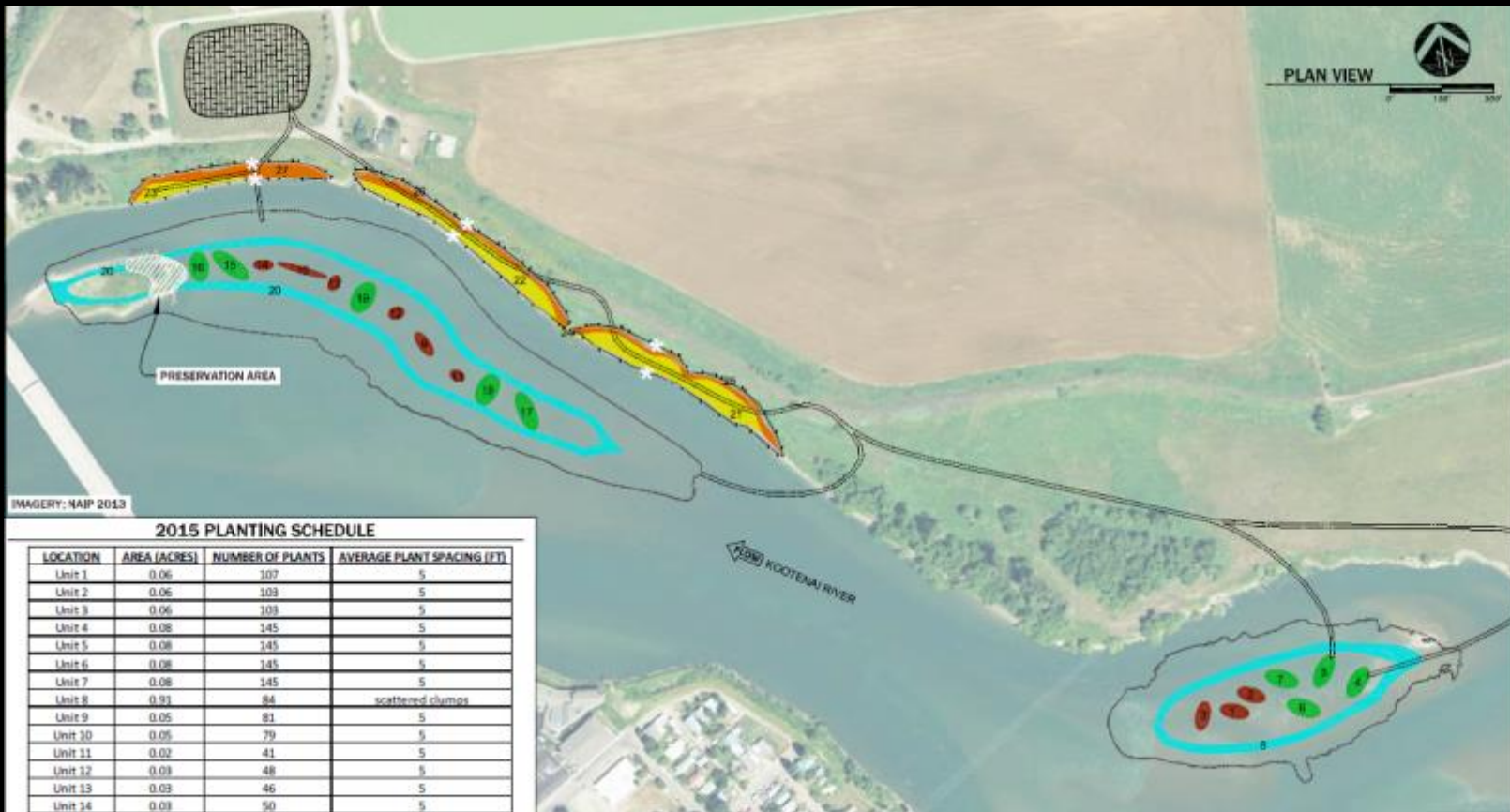












#### APPLICABLE TECHNICAL SPECIFICATIONS

01560	ENVIRONMENTAL CONTROLS
01600	PROTECTION OF MATERIALS
01640	OWNER FURNISHED MATERIALS
02920	FENCE
02930	TREE AND SHRUB PLANTING
02940	BROWSE PROTECTION
02950	BRUSH BUNDLES
02960	VEGETATION SALVAGE AND TRANSPLANT
02970	WILLOW FASCINES

\*REFER TO DRAWINGS 12.3 & 12.4 FOR PLANT SPECIES ALLOCATION\*

\*REFER TO DRAWING 12.10 FOR FENCE DETAILS\*



## PLANTING PLAN - SITE 1 & 2

NO.	DATE	BY	DESCRIPTION	CHECKED
1	11/15/11	WVP	REVISED	AND
2	03/01/14	WVP	REVISED	AND
3	04/15/15	WVP	REVISED	AND

PROJECT NUMBER  
RDG-1342-2

SHEET NUMBER

**12.1**









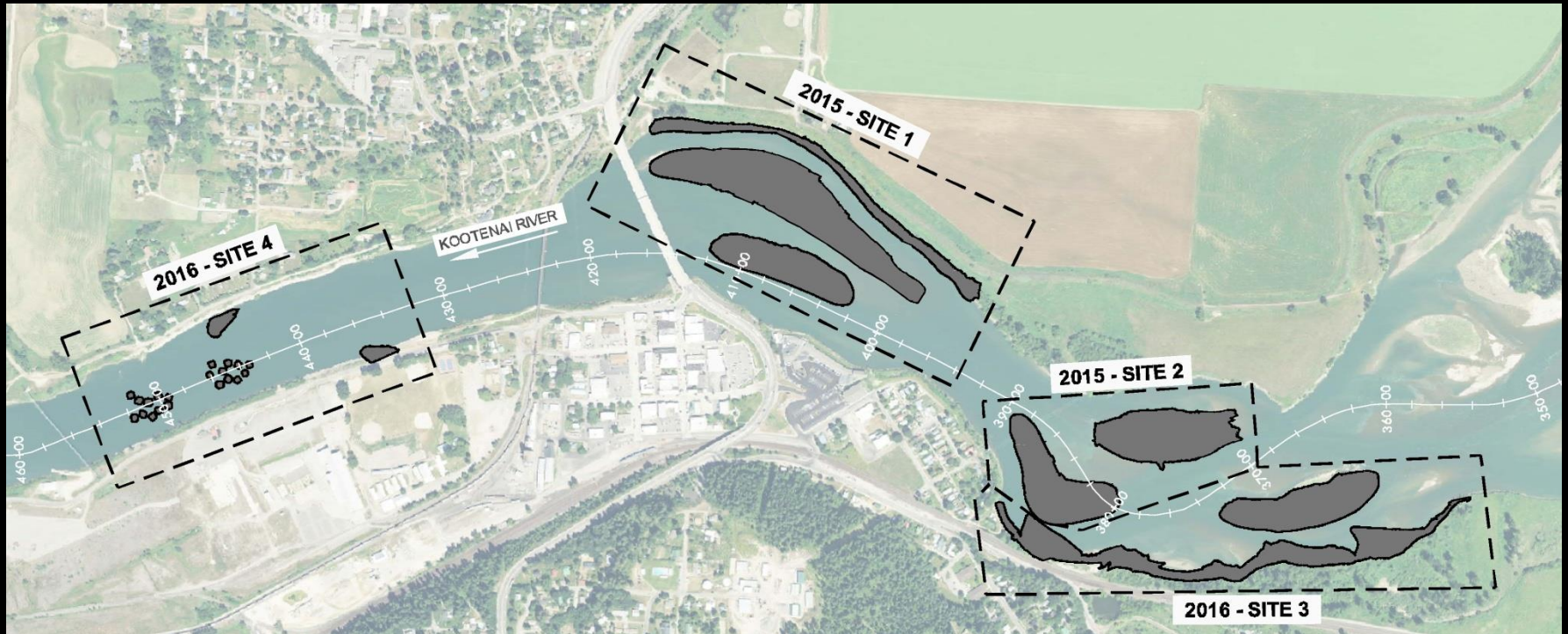






# Construction Phasing 2015-2016

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# Bonniers Ferry Islands Project 2015-2016



## RESTORATION TREATMENTS

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 Island construction

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 Pool creation

0 250 500 750 1,000 Feet

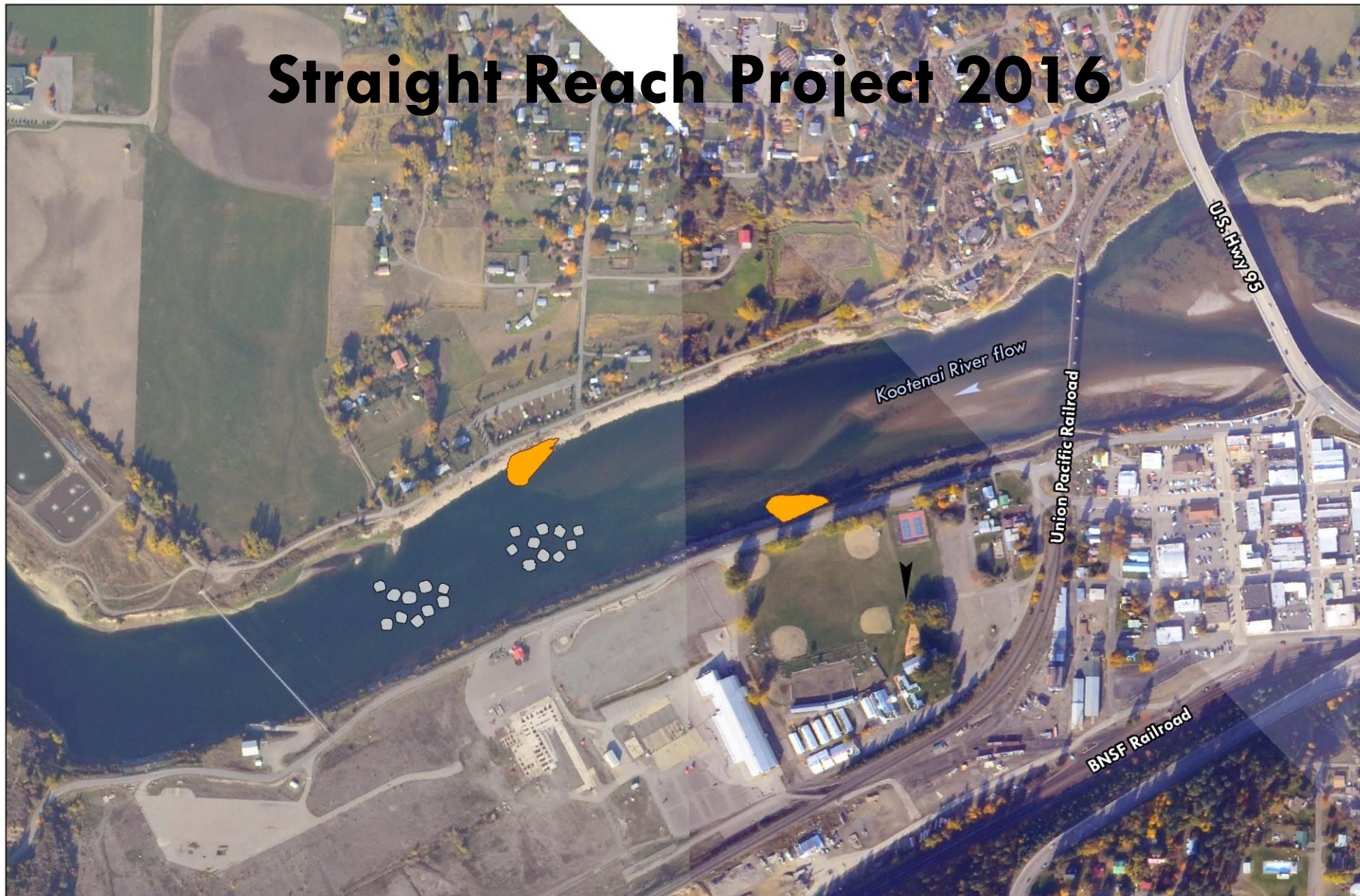


Imagery: Low flow aerial photos, October 2011






# Straight Reach Project 2016



## RESTORATION TREATMENTS

 Pool forming structure

 Substrate cluster

 Feet  
0 250 500 750 1,000



Imagery: Low flow aerial photos, October 2011









Barge

Conveyor

Construction  
Access  
& Staging Area

Public Boat  
Ramp Access



## **Kootenai Tribe of Idaho Public Sturgeon Release May 20th, 2016**

**9am-Noon**

The Kootenai Tribe of Idaho would like to extend an invitation to the community to participate in the releasing of hatchery-reared juvenile white sturgeon into the Kootenai River. We hope to provide all those interested an opportunity to release fish and to ask questions about our programs and the fish. This event will take place Friday, May 20, 2016, between 9:00 AM and 12:00 PM (Pacific Standard Time) at the public Search and Rescue Boat Ramp (located by the Boundary County Waterways Building) 1 mile west on Riverside Street. Since this is a public boat launch, please be sure to park only in the designated areas.







# Acknowledgements

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## Kootenai Tribe of Idaho

BC Ministry of Forests Land and  
Natural Resource Operations  
Bureau of Land Management  
Bonneville Power Administration  
Boundary County  
City of Bonners Ferry  
Confederated Salish and Kootenai  
Tribes  
D.J. Warren & Associates, Inc.  
Goodfellow Brothers, Inc.  
Idaho Department of Fish and Game  
Idaho Department of Lands  
Idaho Department of Environmental  
Quality  
Idaho Department of Water Resources

Idaho Office of Species Conservation  
Kootenai Tribal Council  
Kootenai Valley Resource Initiative  
Meridian Environmental, Inc.  
Montana Fish Wildlife and Parks  
Natural Resource Conservation Service  
Northwest Power and Conservation  
Council  
Peer Review Advisory Team  
River Design Group, Inc.  
U.S. Army Corp of Engineers  
U.S. Fish and Wildlife Service  
U.S. Forest Service  
U.S. Geological Survey  
Ziji Creative Resources, Inc.