

Malheur National Forest



Aquatic Restoration NEPA

Increasing the Scale and Pace

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Today's Talk



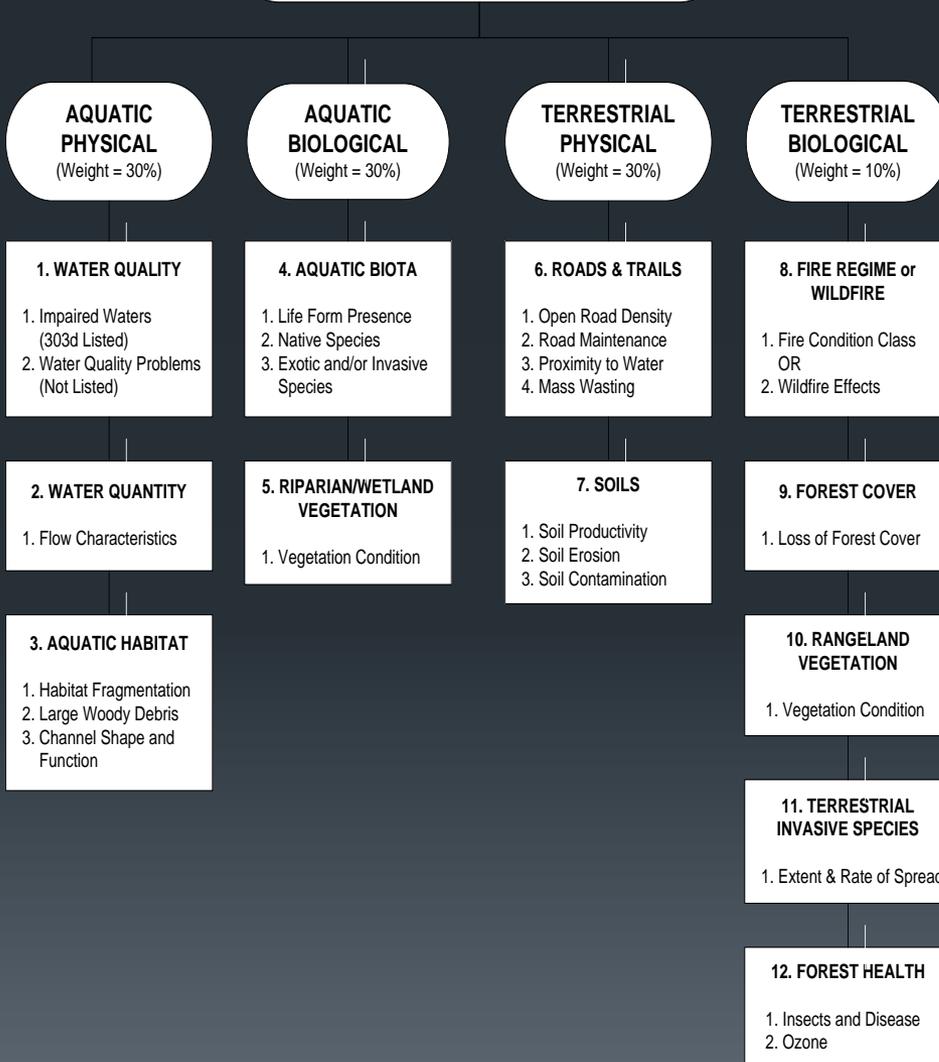
- Scope of the problem (Assessing Watershed Condition and the six step process associated with the Watershed Condition Class Framework. (WCF))
- History and Chronology of the Aquatic Restoration NEPA Project
- Programmatic vs Site Specific Analysis
- Examples of Implementation
- Key's to success

The scope of the problem

- A recent Forest Service assessment (assessing watershed condition; 2010) classified over half of national forest watersheds in the Pacific Northwest as either impaired or functioning at risk based on 12 ecological indicators.
- In addition, many of the watersheds that are functioning properly need work to maintain their good condition.
- The results of this assessment point towards a **need** for restoration

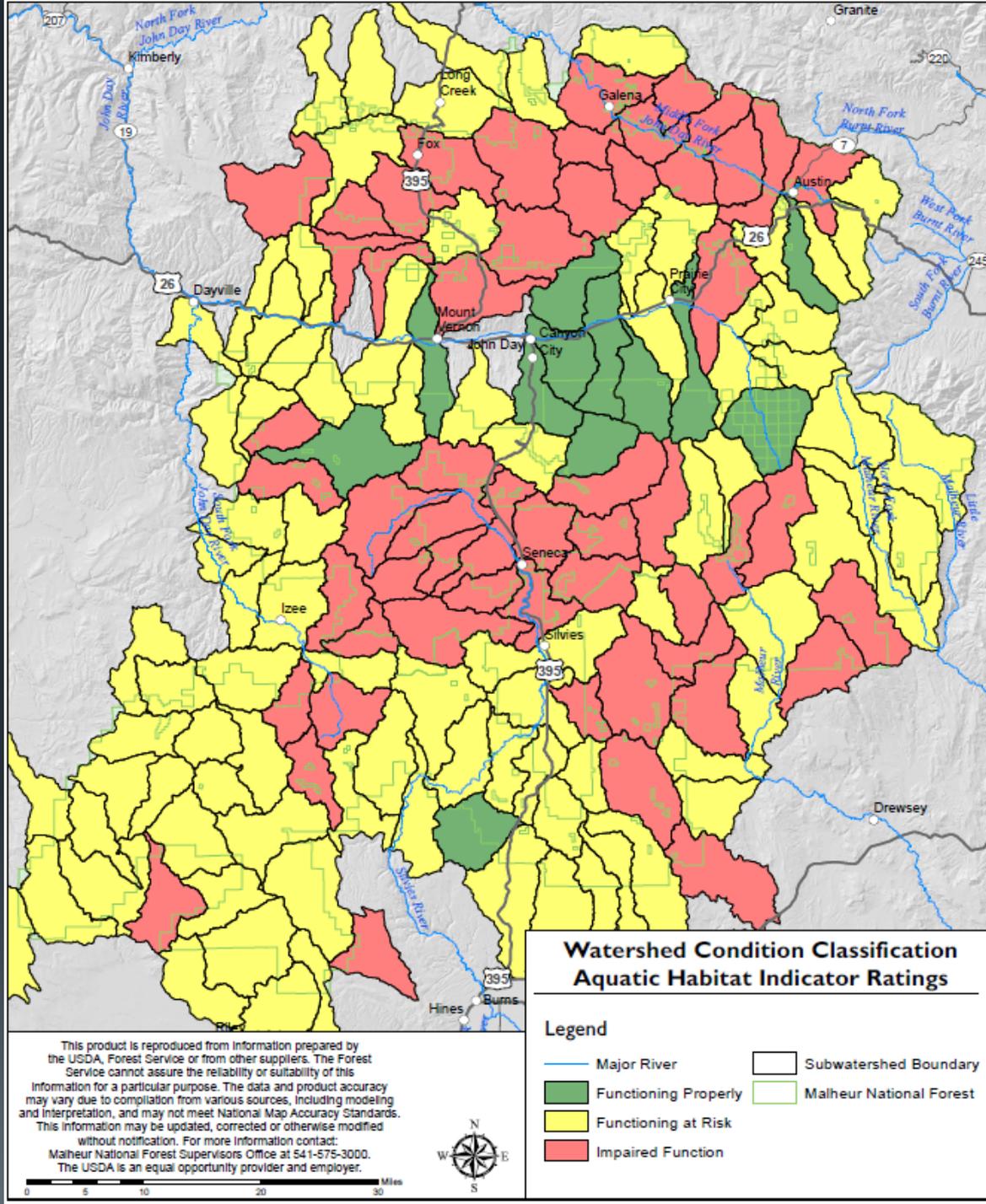
Watershed Condition Indicators

WATERSHED CONDITION INDICATORS (12 Indicator Model)



1. Water Quality
2. Water Quantity
3. Aquatic Habitat
4. Aquatic Biota
5. Riparian/Wetland Vegetation
6. Roads and Trails
7. Soils
8. Fire Regime or Wildfire
9. Forest Cover
10. Rangeland Vegetation
11. Terrestrial Invasive Species
12. Forest Health

Figure 1. Aquatic Habitat Indicator Ratings for MNF subwatersheds.



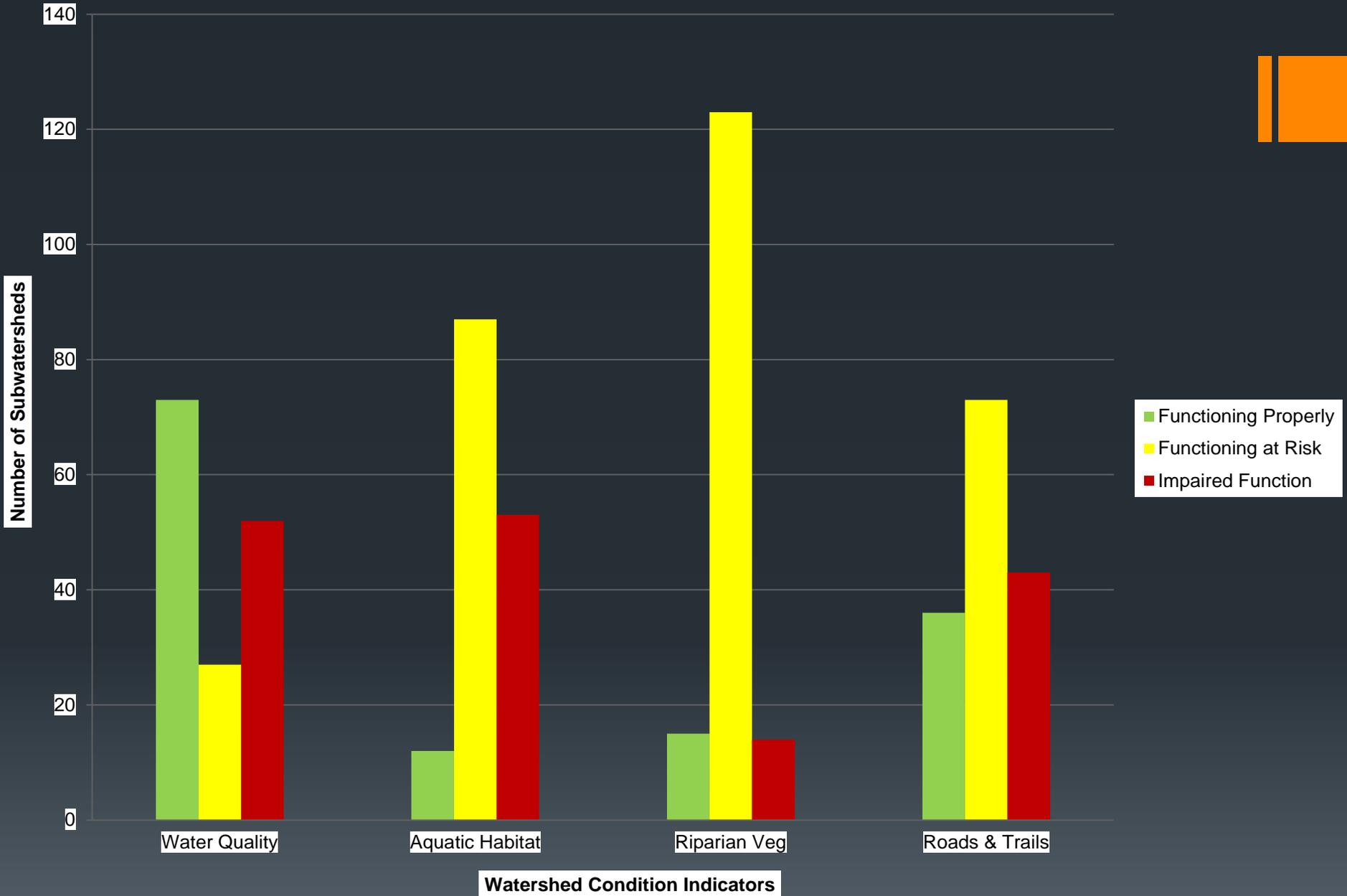
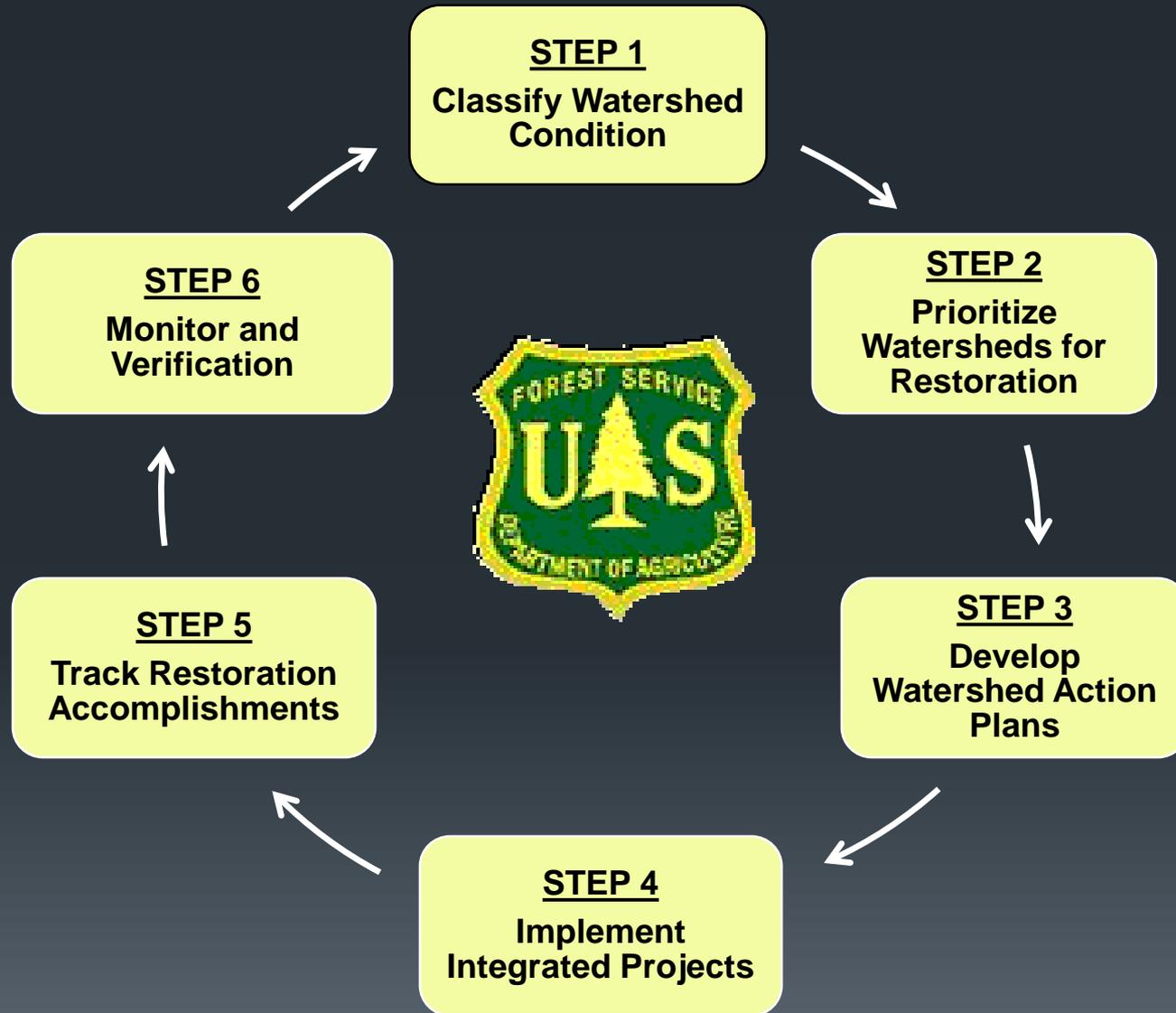
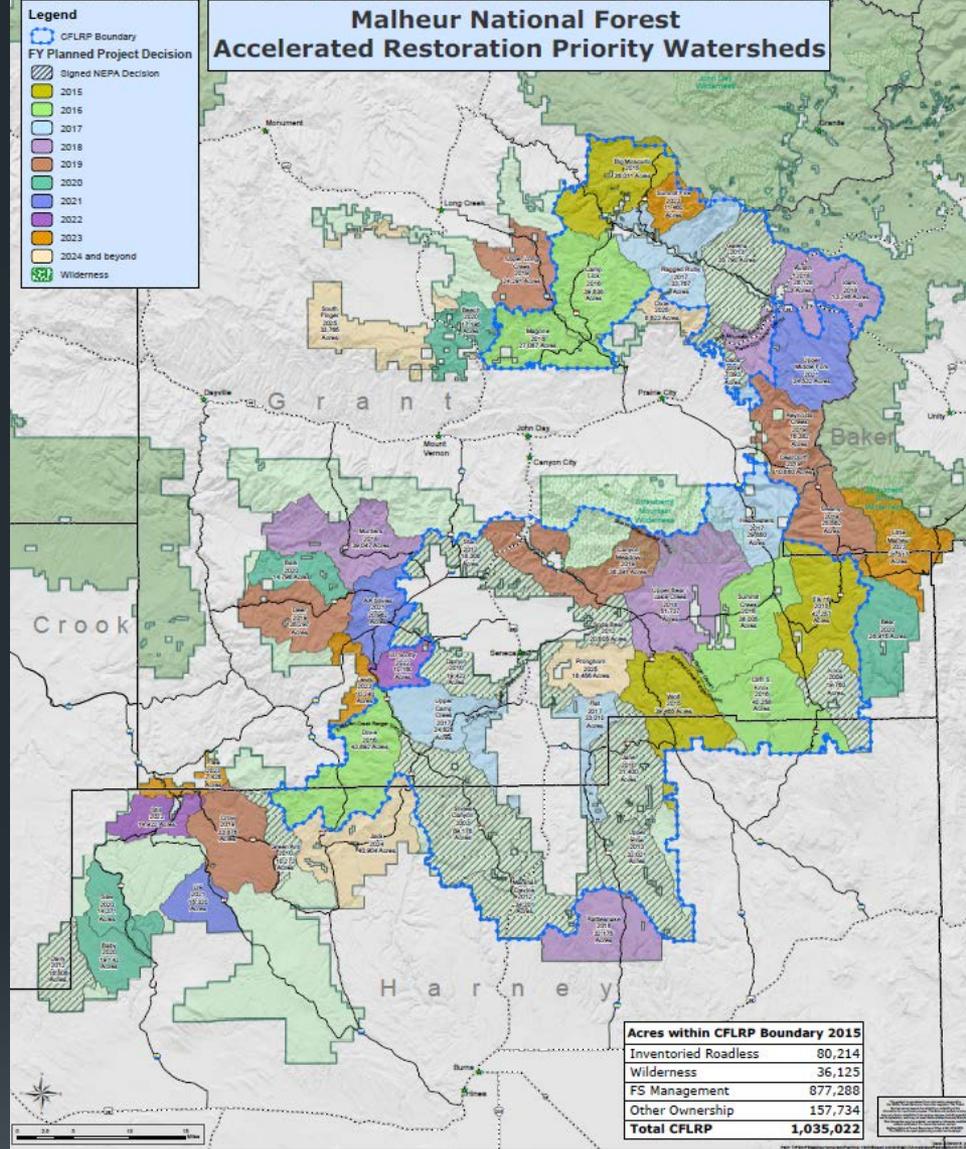
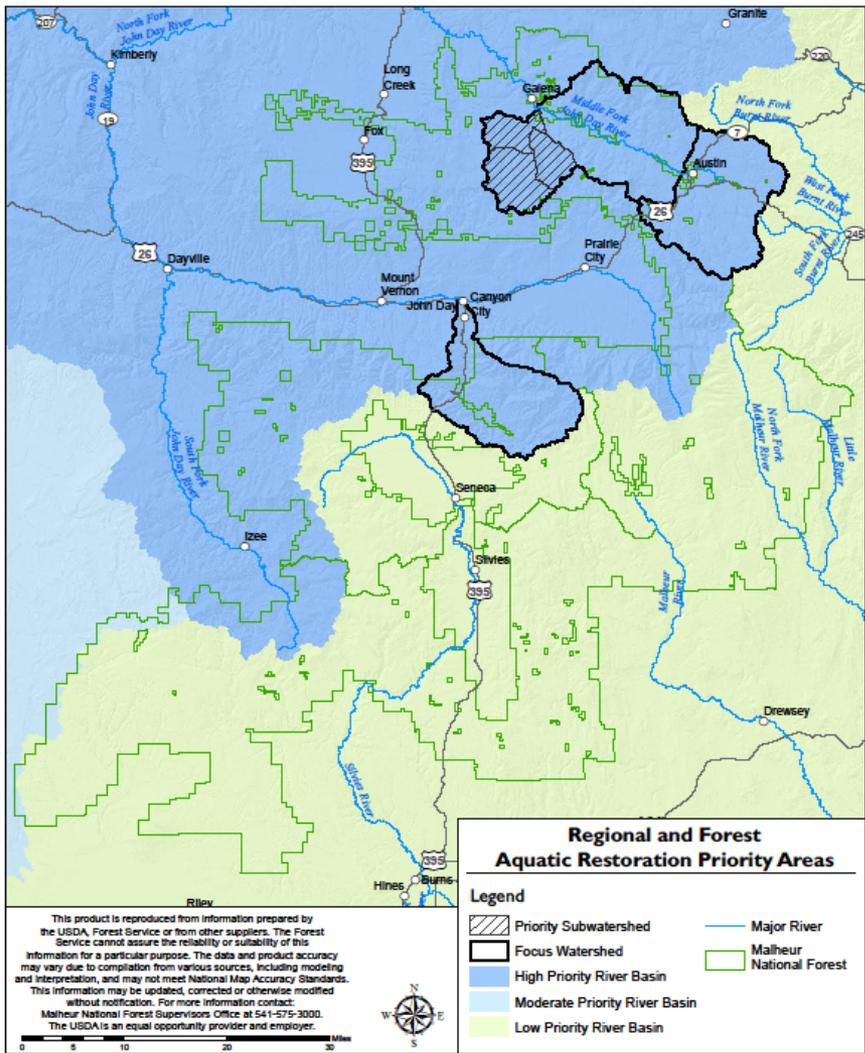


Figure 2. Number of subwatersheds by condition class for selected indicators.

Watershed Condition Framework





Forest Aquatic Restoration Priority Areas based on National, Regional, and local analysis.

The Malheur National Forest Accelerated Vegetation Restoration Schedule and Collaborative Forest Landscape Restoration Project Area.

The Plan



- Forest IDT completed the NEPA, on a variety of aquatic restoration actions across the entire National Forest.
- The NEPA tiered directly to project categories and Design Criteria identified within the 2013 Aquatic Restoration Biological Opinion (ARBO II)
- The product was an Environmental Assessment.

Project History



- On January 13, 2014 the Project Initiation letter went out to the Forest IDT from the Forest Supervisor.
- The Forest started scoping the project on January 17, 2014.
- Environmental Assessment was completed in August of 2014.
- Decision Notice was signed September 30th.
- A little over 8 months to complete.

Project Categories



- 1. Fish Passage Restoration (Stream Simulation Culvert and Bridge Projects; Headcut and Grade Stabilization; Fish Ladders; Irrigation Diversion Replacement/Relocation and Screen Installation/Replacement).
- 2. Large Wood (LW), Boulder, and Gravel Placement (LW and Boulder Projects; Engineered Logjams; Porous Boulder Weirs and Vanes, Gravel Augmentation; Tree Removal for LW Projects).
- 3. Dam, Tide gate, and Legacy Structure Removal.
- 4. Channel Reconstruction/Relocation.
- 5. Off- and Side-Channel Habitat Restoration.
- 6. Streambank Restoration.
- 7. Set-back or Removal of Existing Berms, Dikes, and Levees.
- 8. Reduction/Relocation of Recreation Impacts.
- 9. Livestock Fencing, Stream Crossings and Off-Channel Livestock Watering.
- 10. Piling and other Structure Removal.

Project Categories Continued



- 11. In-channel Nutrient Enhancement.
- 12. Road and Trail Erosion Control and Decommissioning.
- 13. Non-native Invasive Plant Control.
- 14. Juniper Removal.
- 15. Riparian Vegetation Treatment (PCT, Hardwood Restoration and Controlled Burning).
- 16. Riparian Vegetative Planting.
- 17. Bull Trout Protection.
- 18. Beaver Habitat Restoration.
- 19. Sudden Oak Death (SOD) Treatments.
- 20. Fisheries, Hydrology, Geomorphology Wildlife, Botany, and Cultural Surveys in Support of Aquatic Restoration.



Programmatic

-VS-

Site Specific Analysis

Figure 3. Existing Culverts in the project area that provide potential Fish Passage Restoration Projects.

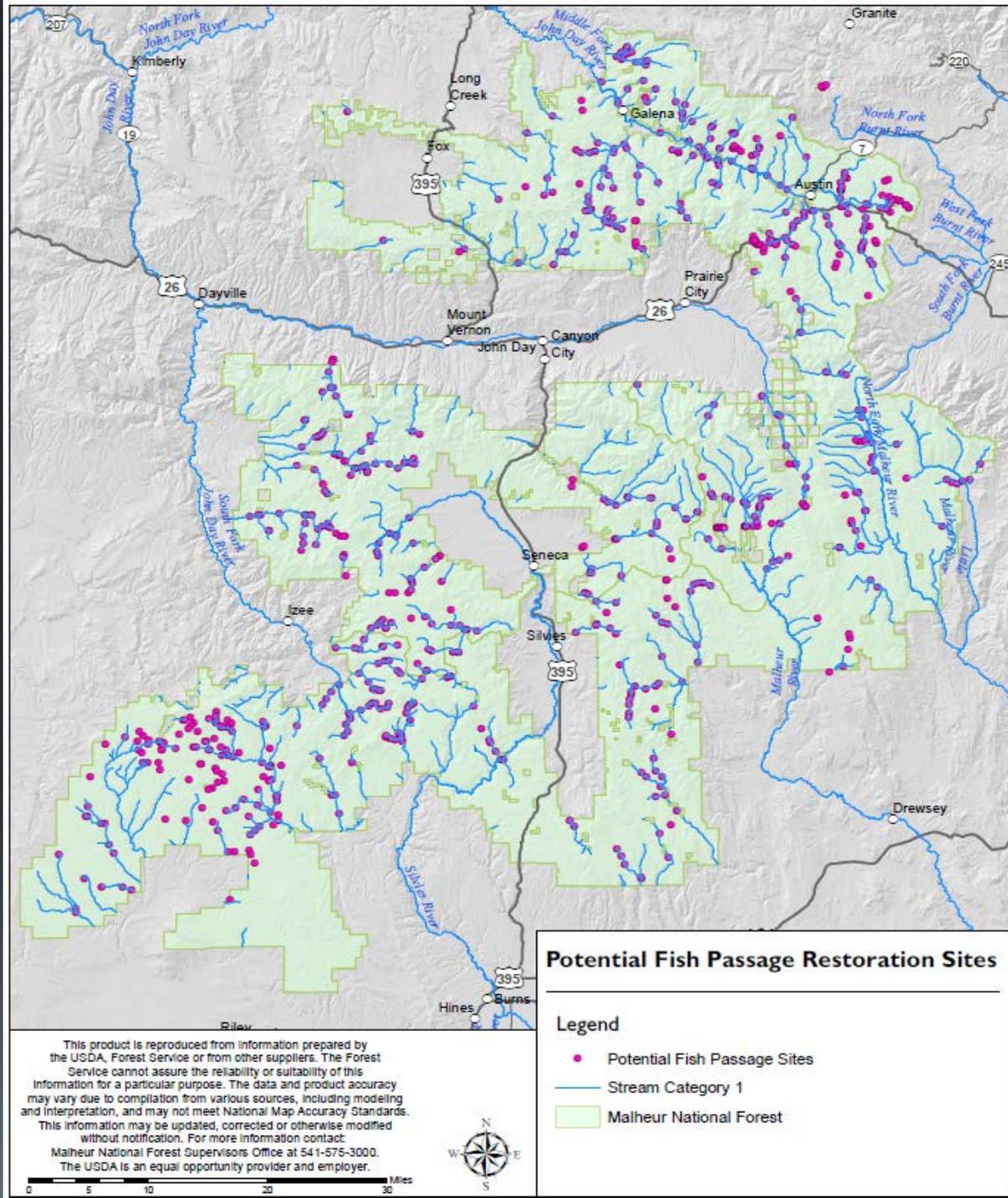


Figure 4. Riparian Habitat Conservation Areas where various aquatic restoration activities and improvements would occur for large wood, boulder and gravel replacement; legacy structure removal; channel reconstruction/relocation; off- and side- channel habitat restoration; streambank restoration; set-back or removal of existing berms, dikes and levees; reduction/relocation of recreation impacts; livestock fencing, stream crossings and off-channel livestock watering; piling and other structure removal; riparian vegetation treatment (controlled burning); riparian vegetative planting; beaver habitat restoration.

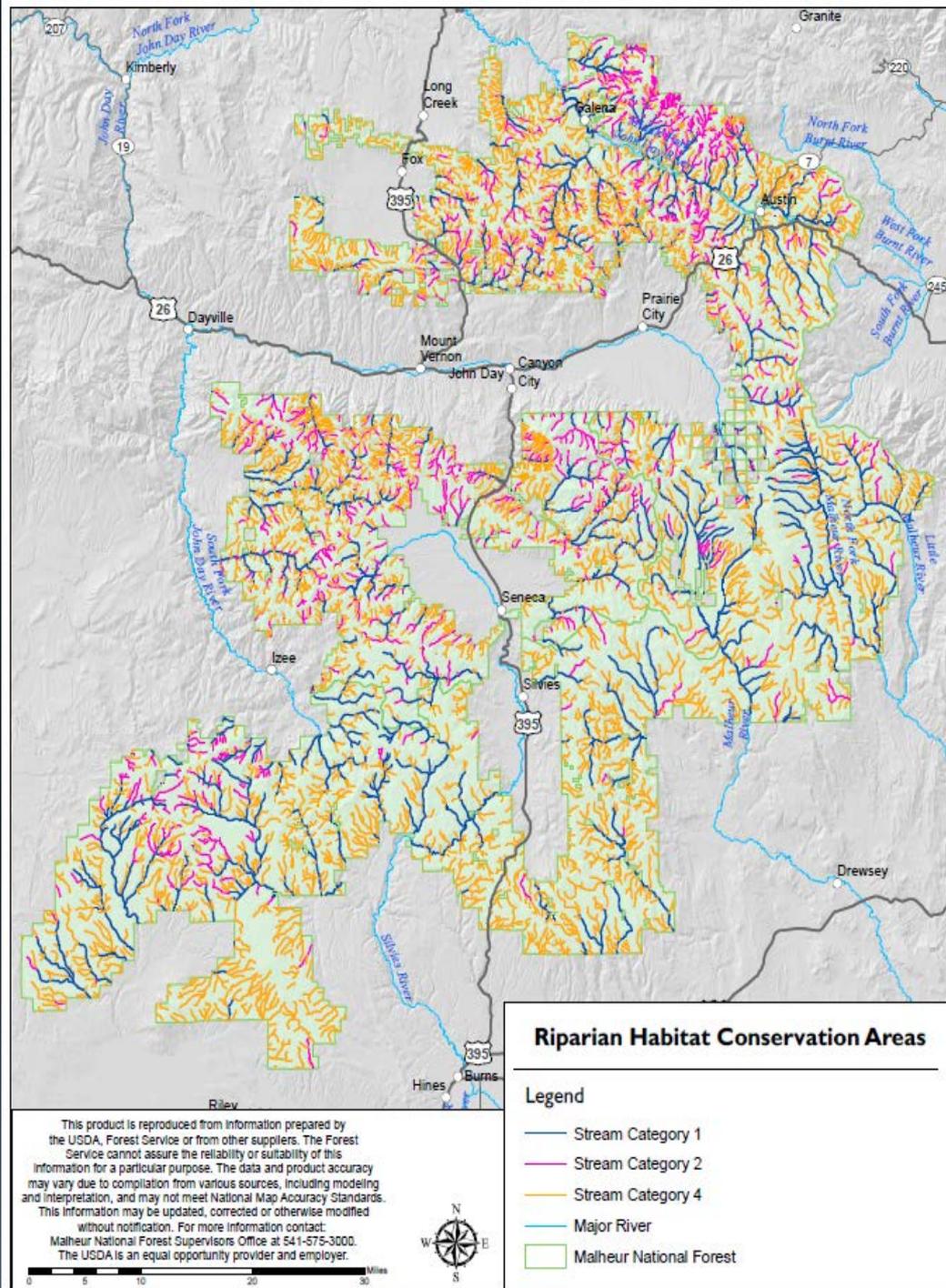
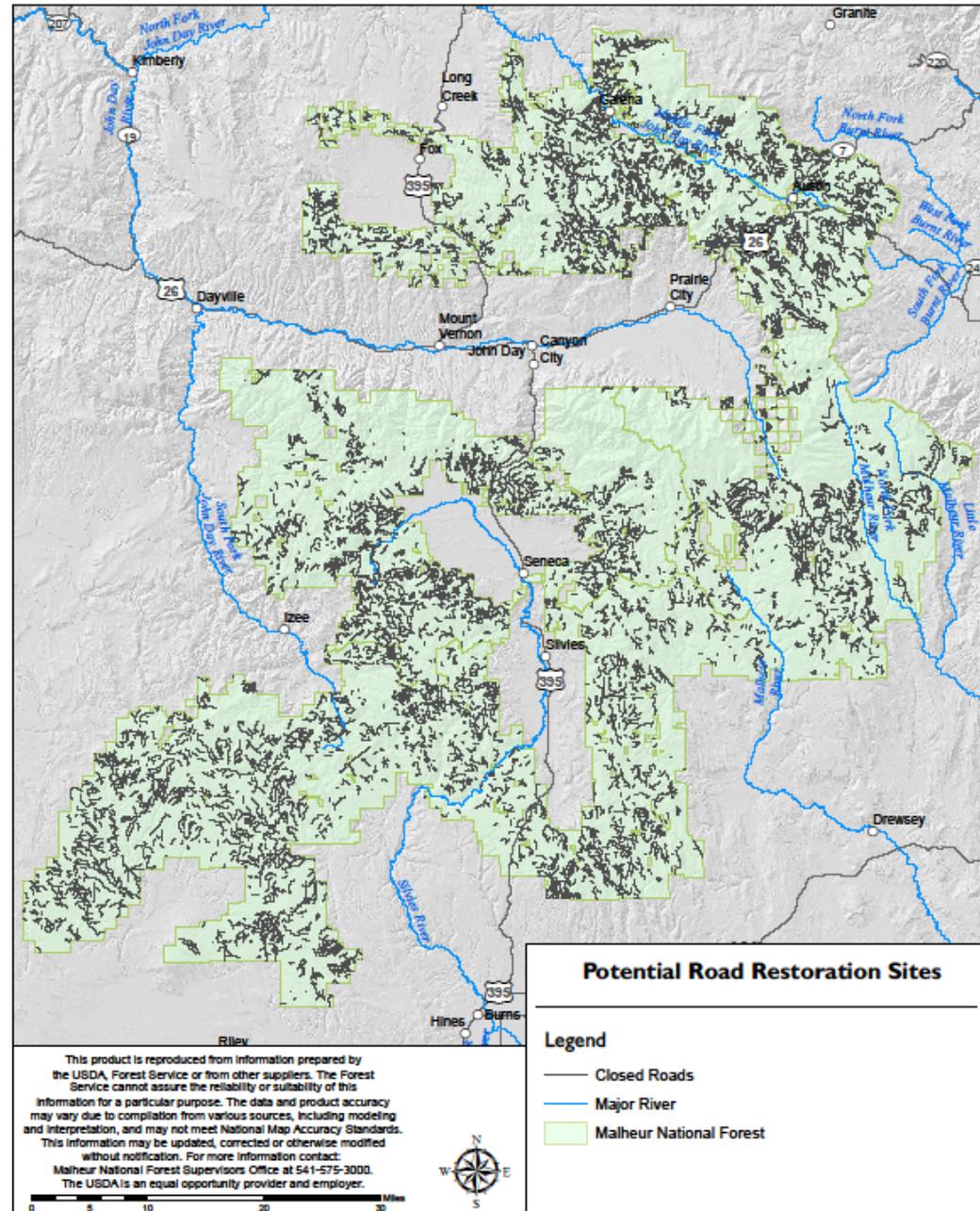
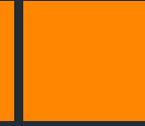


Figure 5. Potential Road Restoration Sites





Examples of Project Types

Camp Creek 5th Field Watershed

Butte Creek Culvert Replacement Before and After Pictures (Provided access for Bull Trout and Chinook Juveniles)





Upper South Fork John Day River Restoration Project

Fish Passage Projects

Accomplishments

- 3 fish passage diversions with fish screens
- 1 culvert replaced

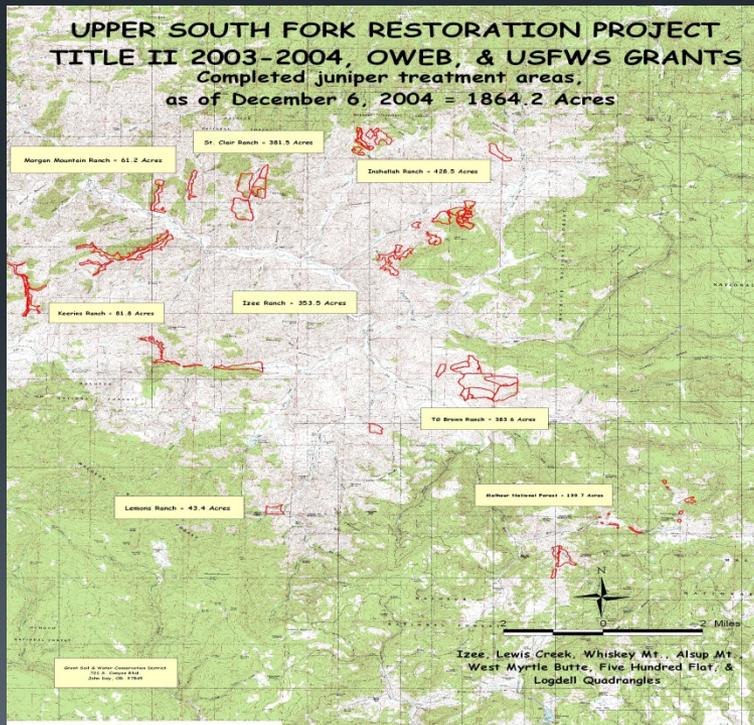


Upper South Fork John Day River Restoration Project

Juniper Removal

Accomplishments

- Juniper removal completed on 2,120 acres

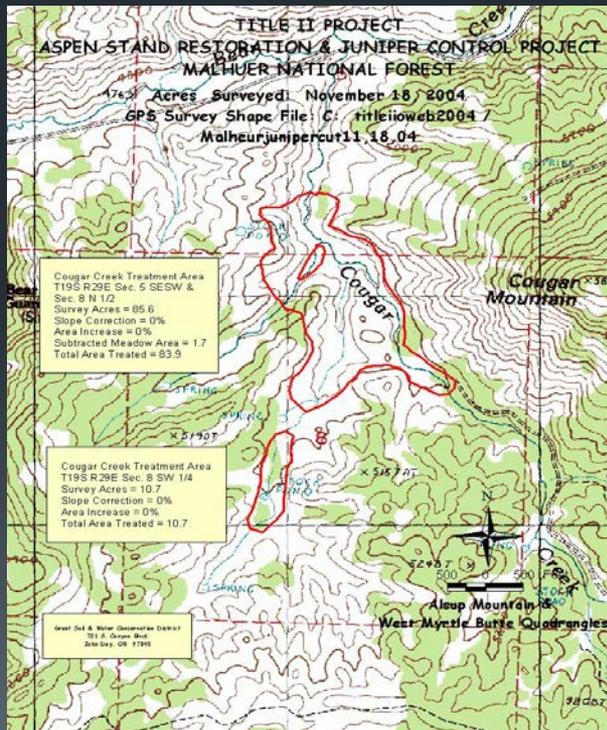


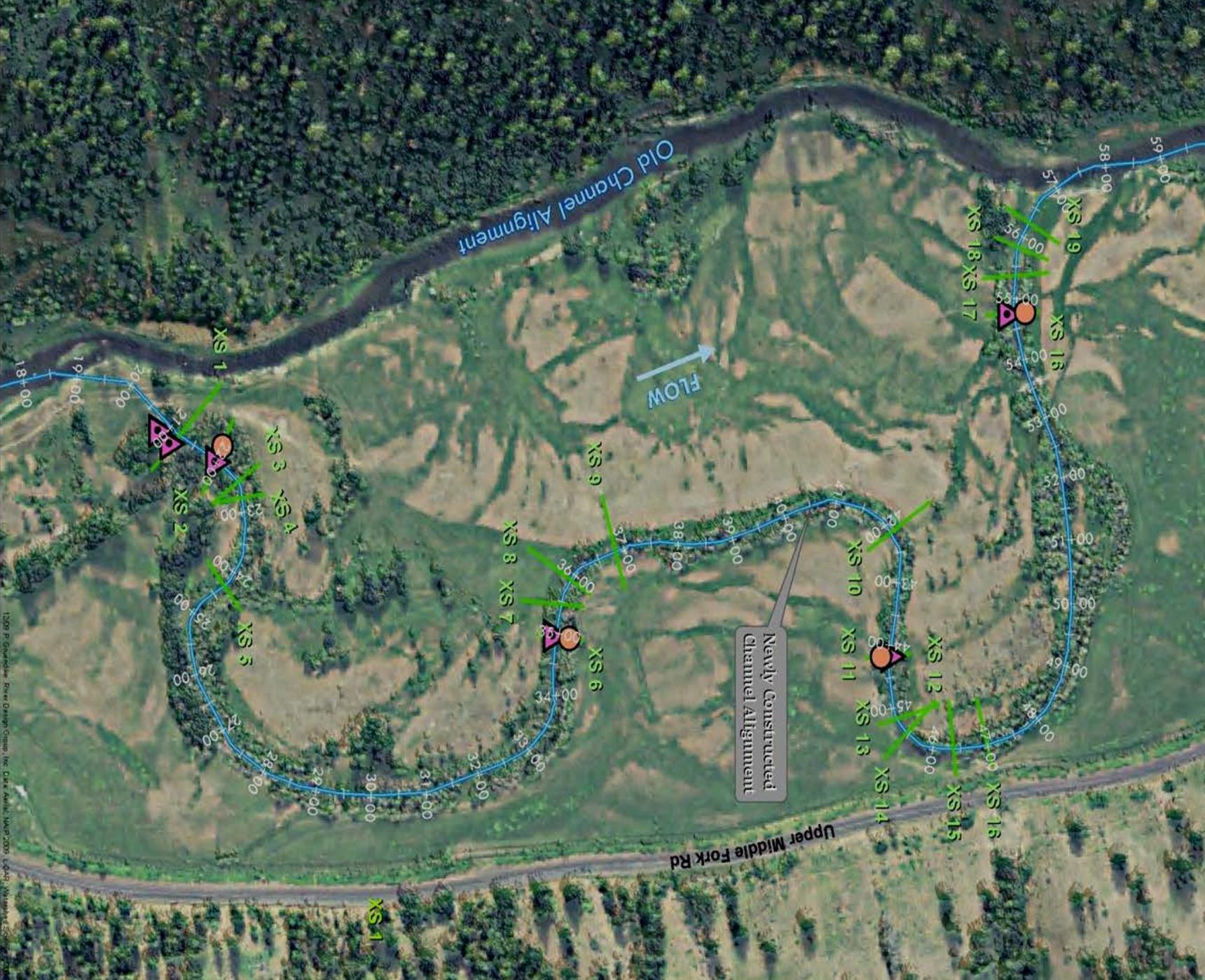
Upper South Fork John Day River Restoration Project

Aspen Release

Accomplishments

- Conifer thinning to release aspen stands on 36 acres





Data Collection Locations

Middle Fork John Day Reach 1



Features

-  Pebble Count Locations
-  Scour Chain Locations
-  XS Locations
-  Channel Centerline

1209 P. Edwards - River Design Group, Inc. Data Available: March 2009, LCRB, Millwright, SD

Specific Resource Project Design Criteria for Resource Protection and Forest Plan Compliance.

Project Number: 5 (Lower Camp Creek Riparian Planting)

Date: 4/1/2011

Heritage

- Specific PDC for Heritage addressed (Heritage Surveys; Avoidance areas).

Botany

- Specific PDC for Botany addressed (Sensitive Plant Surveys).

- Specific PDC for Nox. Weeds addressed.

Land Management Consistency

- | | | | |
|---|------------------------|--|---|
| <input type="checkbox"/> 4A | Big Game Winter range | <input checked="" type="checkbox"/> 9 | Research Natural Areas |
| <input checked="" type="checkbox"/> 6A and 6B | Wilderness | <input checked="" type="checkbox"/> 10 | Semi-Primitive Non-Motorized Recreation Areas |
| <input checked="" type="checkbox"/> 7 | Scenic Area | <input checked="" type="checkbox"/> 22 | Wild and Scenic River |
| <input checked="" type="checkbox"/> 8 | Special Interest Areas | <input checked="" type="checkbox"/> | Inventoried Roadless Areas |

Comments: Project was reviewed and is consistent with the goals, objectives and standards and guidelines of the Malheur NF Land and Resource Management Plan. The project does not fall within any of the above checked land management areas. The project does occur within Big Game winter range but will be implemented outside of the seasonal restrictions.

Table 2. Projects Design Criteria and Forest Plan compliance checklist.

I have reviewed this project and have determined it is within the Project Design Criteria identified for my resource.			
Resource	Signature	Date	Comments
Heritage	/s/ Don Hann	(4/1/2011)	Site was reviewed on 3/9/2011, Heritage clearance has occurred, there are no avoidance areas within the project area.
Botany	/s/ Joe Rausch	(4/1/2011)	Botany surveys occurred on 3/12/2011, no sensitive plans were documented within the project area. Native plants were collected within the project eco-zone and propagated at Clarno nursery in 2009. native material is being utilized within the project. Project is consistent with Noxious weeds PDC's.
Wildlife	/s/ Clark Reams	(4/1/2011)	No concerns, outside the raptor breeding season and does not impact winter range.
Fish*	/s/ Steve Namitz	(4/1/2011)	Project is consistent with Aquatic Objectives and is consistent with ARBO II PDC's.
Hydrology*	/s/ Tom Friedrichsen	(4/1/2011)	Project is consistent with meeting Water Quality objectives, and is expected to restore hydrologic functions and watershed/riparian processes.
Range	/s/ Ernie Gipson	(4/1/2011)	No comments
Soils	/s/ Hersh McNeil	(4/1/2011)	No Comments
Recreation	/s/ Rob St. John	(4/1/2011)	No Comments
Lands and Special Uses	/s/ Stacia Kimbell	(4/1/2011)	Project does not impact lands and special uses.
Engineering	/s/ Holly Bentz	(4/1/2011)	No Comments
Fuels / Fire	/s/ Dana Skelly	(4/1/2011)	No Comments
Silviculture	/s/ Larry Amell	(4/1/2011)	No Comments

* Ensure that an experienced fisheries biologist or hydrologist is involved in the design of all projects covered by Aquatic Restoration Biological Opinion II. The experience should be commensurate with technical requirements of a project.

Line Officer Signature: /s/ John Gubel; District Ranger BMRD

Date: 4/1/2011

Project Benefits



- Efficiently Streamlines NEPA to accomplish Accelerated Restoration; ESA recovery; and Water Quality management objectives.
- Reduces NEPA workload for Forest and District Staff
- Accelerates accomplishments of essential projects identified within Watershed Restoration Action Plans and Larger Land Scape Projects

Providing Local Jobs





The Take Home is-

This is a Tool to facilitate holistic restoration actions that can be implemented both on the National Forest and adjacent private lands that want to collaborate and partner on future projects.

2015 Culvert and Road Removal



Channel Reconstruction



Key's To Success!!!!!!

- Assemble a full ID Team
- Have a very defined Project Initiation Letter (PIL)
 - Be very clear on Roles and Responsibilities
- Do as robust of an Outreach and Scoping as possible
 - Make Sure to hit groups like Miners, Special Uses, Livestock Grazing Permitties, Veg collaborative groups, Horse Back and ATV groups, Local Environmental groups, Tribes.
- Make Your IDT proponents of the project.
- Put together a road show!!!!
 - Based on your Scoping, go out and meet with the Folks that commented on your Project.
- Be Flexible!!!!

