

Recovery Program Review

EF Lewis Pilot

Lower Columbia Fish Recovery Board

February 26, 2019

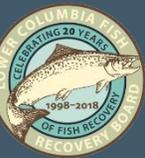


Goals and Objectives

Goal: This scope of work is meant to inventory and evaluate the current status of program implementation since the recovery and watershed plans were adopted.

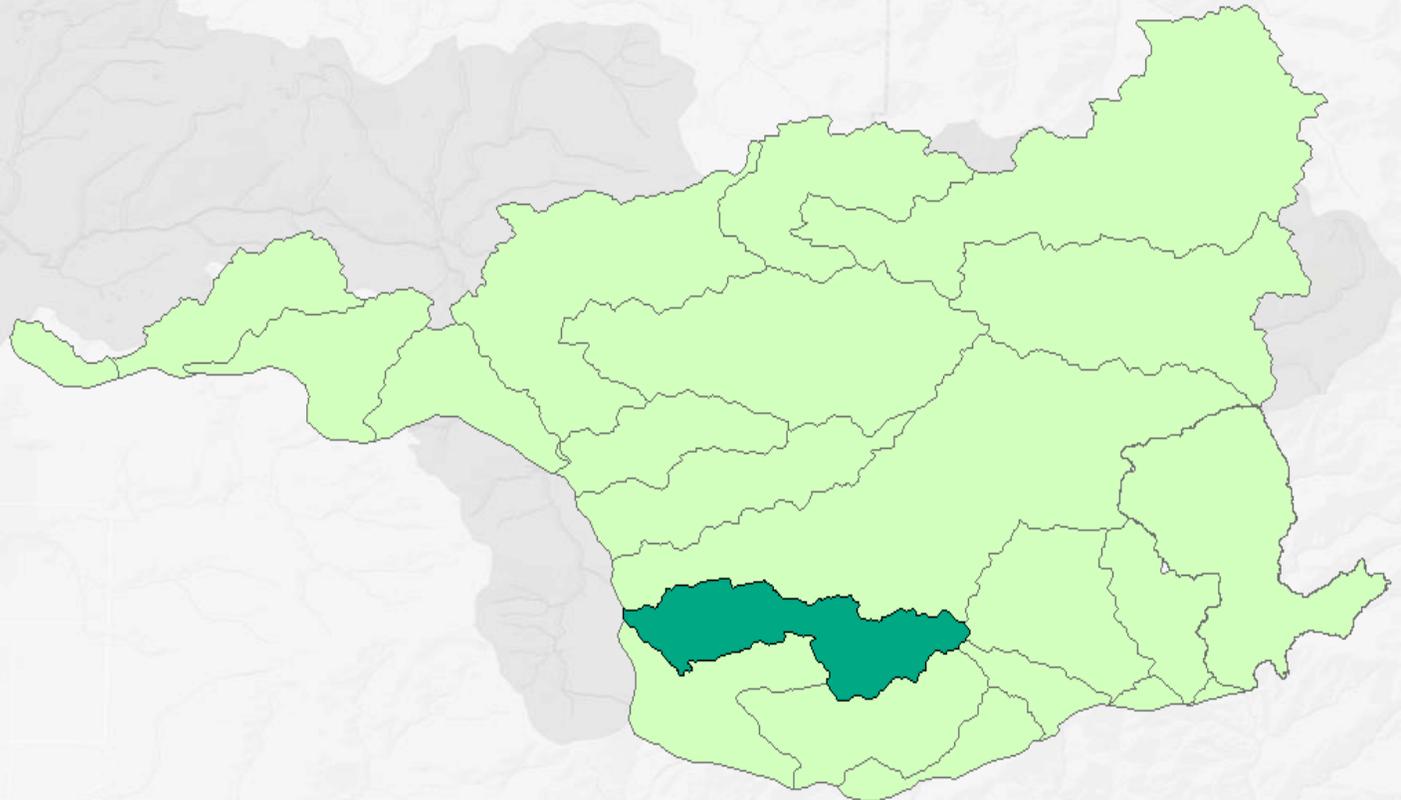
Objective: This evaluation is intended to help answer key questions regarding broad-scale program implementation, including:

- what activities have been implemented,
- what achievements have been accomplished,
- what challenges partners face in implementation.



Why the East Fork Lewis?

- Supports five primary populations
 - Fall Chinook
 - Chum
 - Winter Steelhead
 - Summer Steelhead
 - Coho
- Can largely be divided into three unique sections (east to west)
 - Forestland
 - Federal
 - State owned
 - Private ownership
 - Small Forest Landowner (SFLO)
 - Industrial
 - “Transitional”
 - Lowlands
- No hatcheries or large dams in basin



Recovery Plan- Key Priorities

- **Program Review**
- 1. Protect Intact Forests in Headwater Basins
- 2. Restore Lowland Floodplain Function, Riparian Function and Stream Habitat Diversity
- 3. Manage Growth and Development to Protect Watershed Processes and Habitat Conditions
- 4. Manage Forest Lands to Protect and Restore Watershed Processes
- 5. Restore Passage at Culverts and Other Barriers
- 6. Address Immediate Risks with Short-term Habitat Fixes



Recovery Plan- Key Priorities

- **Conservation and Sustainable Fisheries**
- 7. Align Hatchery Priorities with Conservation Objectives
- 8. Manage Fishery Impacts so they do not Impede Progress Toward Recovery
- 9. Reduce Out-of-Subbasin Impacts so that the Benefits of In-Basin Actions can be Realized



Entities Interviewed (examples)

REGULATORY	RESTORATION
USACE	LCFRB
EPA	RCO
NMFS	BPA
WDFW	WDOE
CLARK COUNTY	COWLITZ INDIAN TRIBE

Please see handout for complete list



Program Review within a Population Context (OFM estimates)

Jurisdiction	2000 Census Count of Total Population	2004 Intercensal Total Population Estimate	2010 Census Count of Total Population	2018 Postcensal Estimate of Total Population
Clark County	345,238	385,370	425,363	479,500



Program Review within a Population Context (OFM estimates)

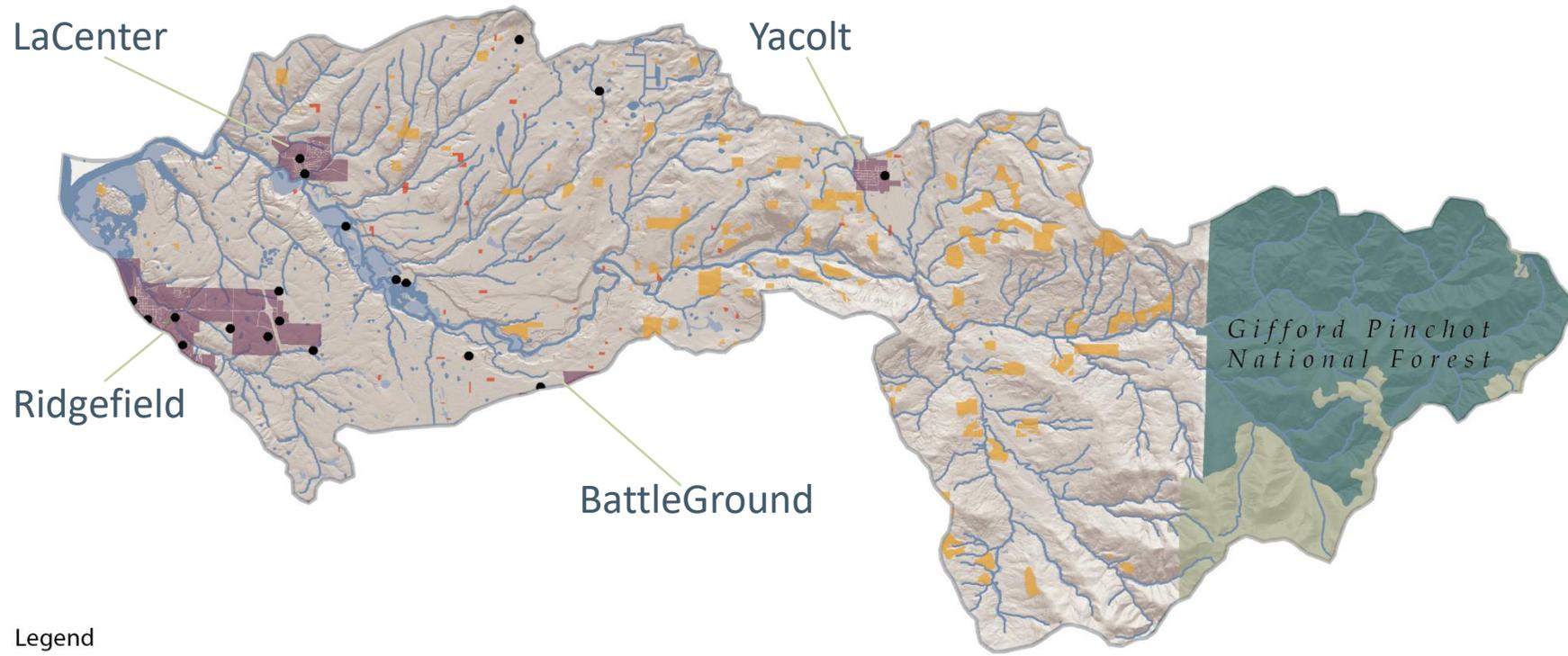
Jurisdiction	2000 Census Count of Total Population	2004 Intercensal Total Population Estimate	2010 Census Count of Total Population	2018 Postcensal Estimate of Total Population
Clark County	345,238	385,370	425,363	479,500

Clark County	Projection 2020	Projection 2025	Projection 2030	Projection 2035	Projection 2040
Low	472,573	494,459	511,964	528,125	540,963
Medium	499,400	540,344	576,879	611,968	643,552
High	549,964	608,158	661,898	714,065	762,479



DRAFT

2004



Legend

● USACE Section 404 or 10 permits

■ City Urban Growth Boundary

Forest Practices Application Permit Area

■ Class II & III General, Class IV Special

■ Class IV General

■ Taxlot with Septic System Permit

Gifford Pinchot National Forest- Land Resource Management Plan

■ Administratively Withdrawn

■ Matrix



0 1.25 2.5 5 Miles

PC TRASK
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D R A F T

2005



Vancouver

Legend

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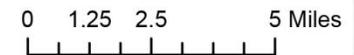
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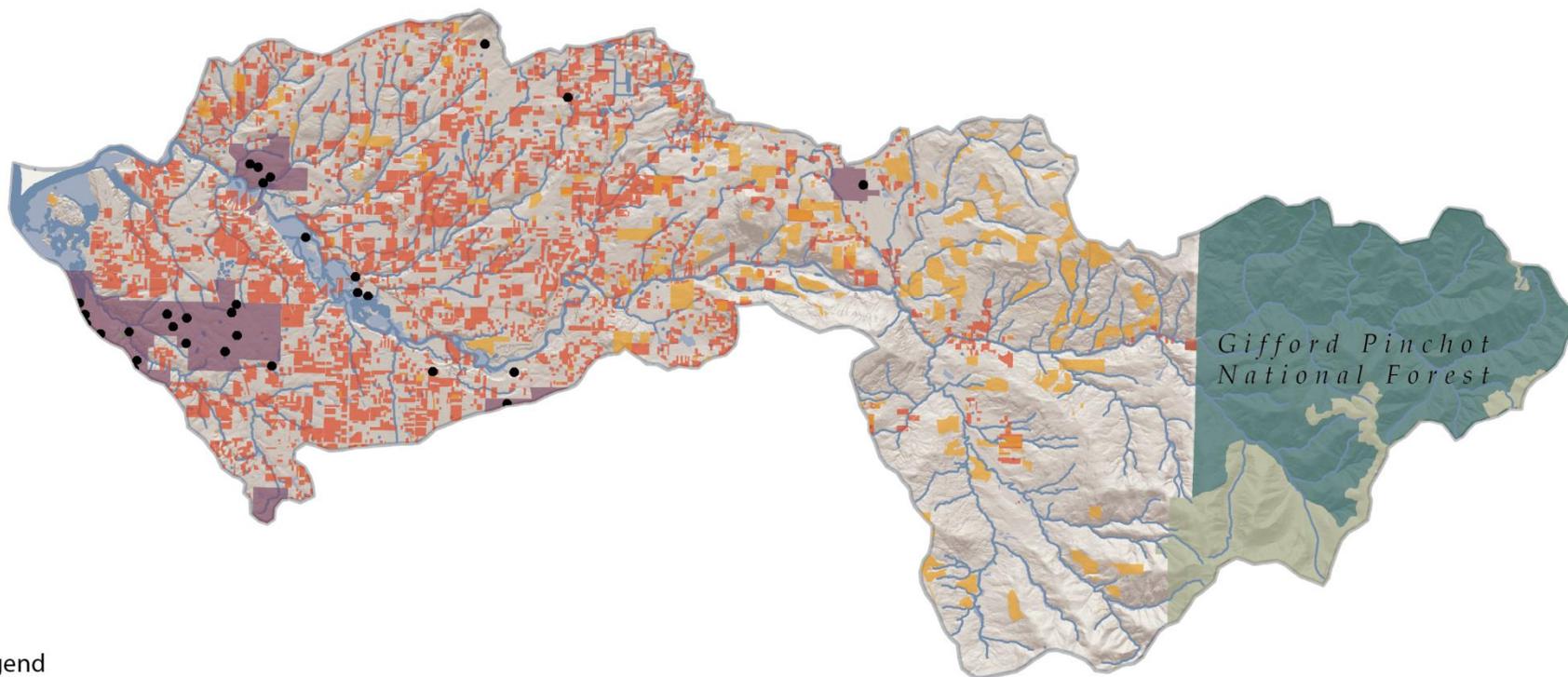


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2006



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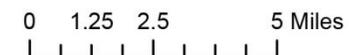
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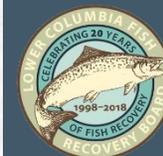
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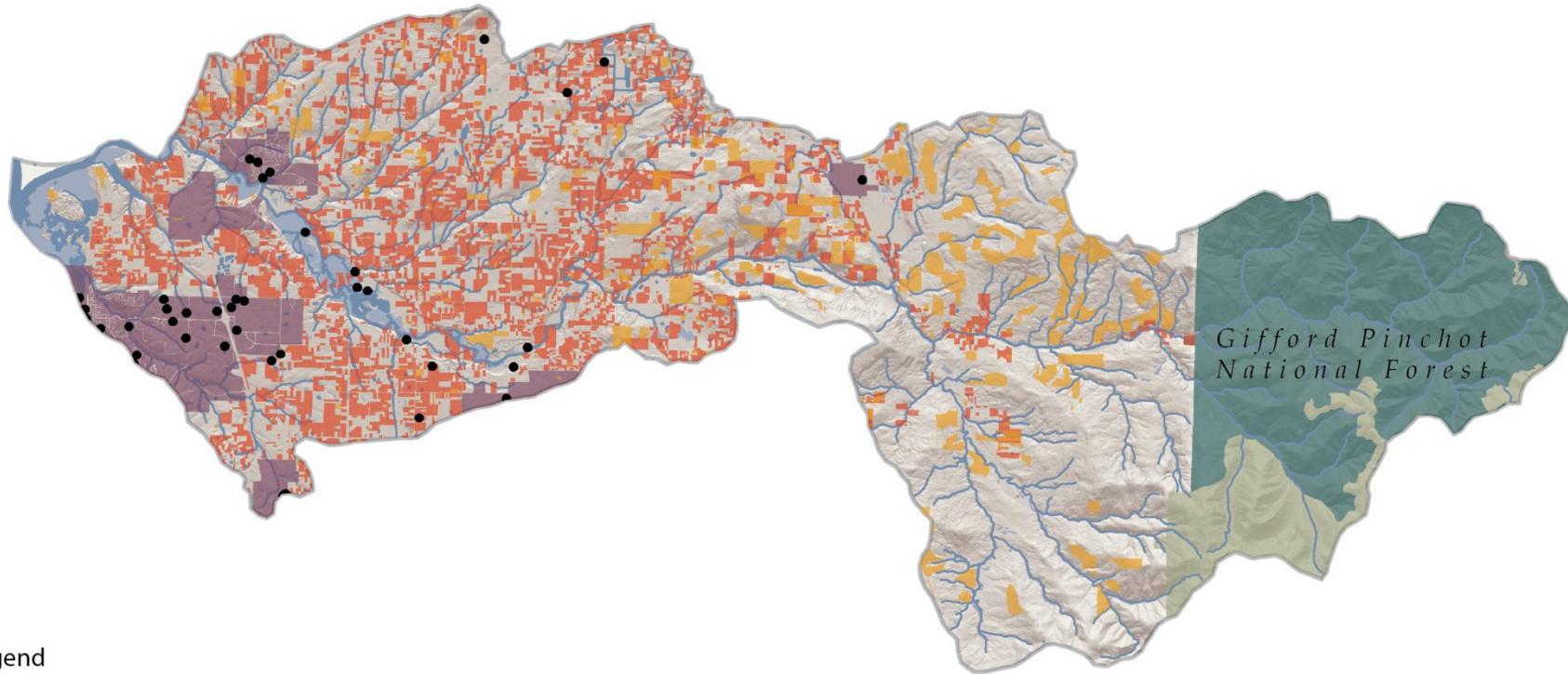


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2007



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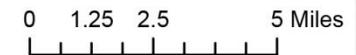
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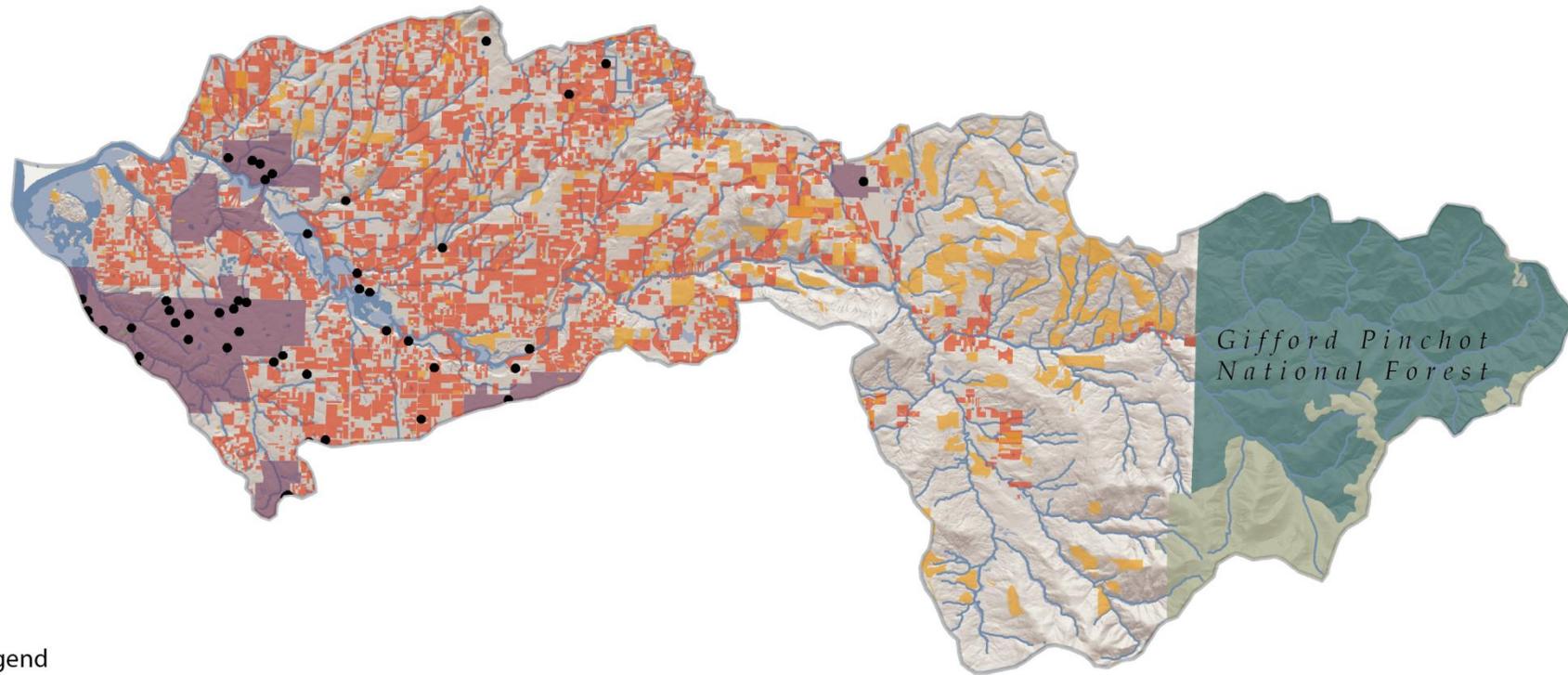


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2008



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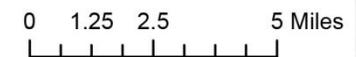
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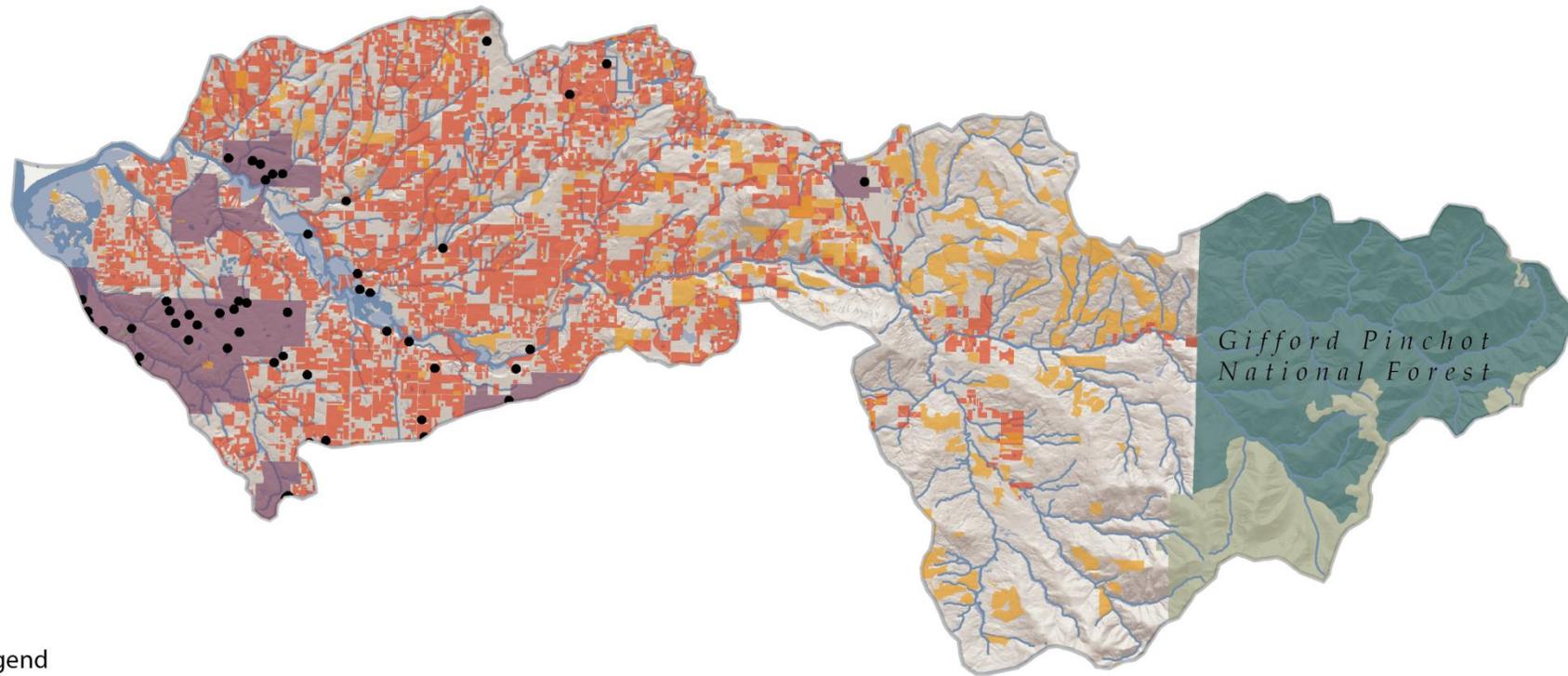


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2009



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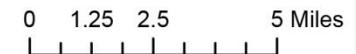
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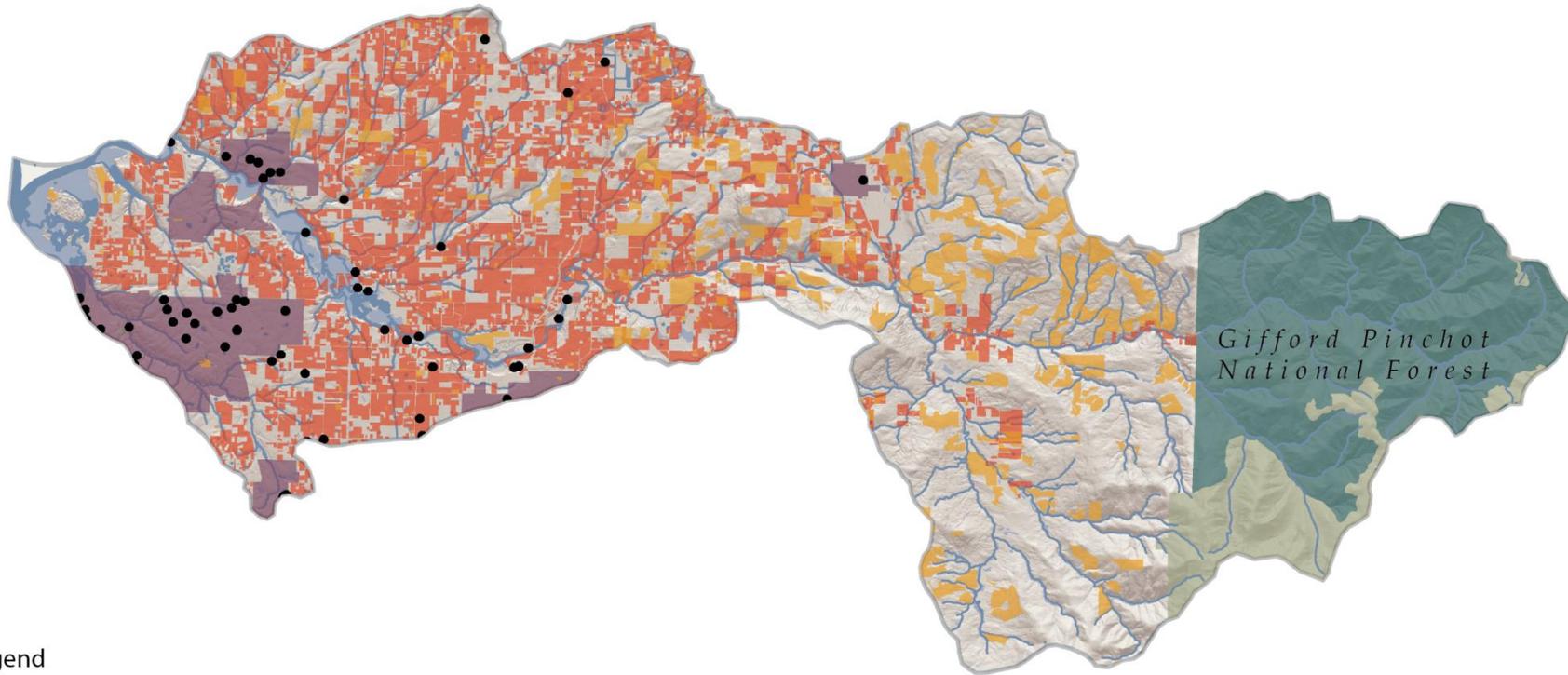


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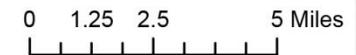
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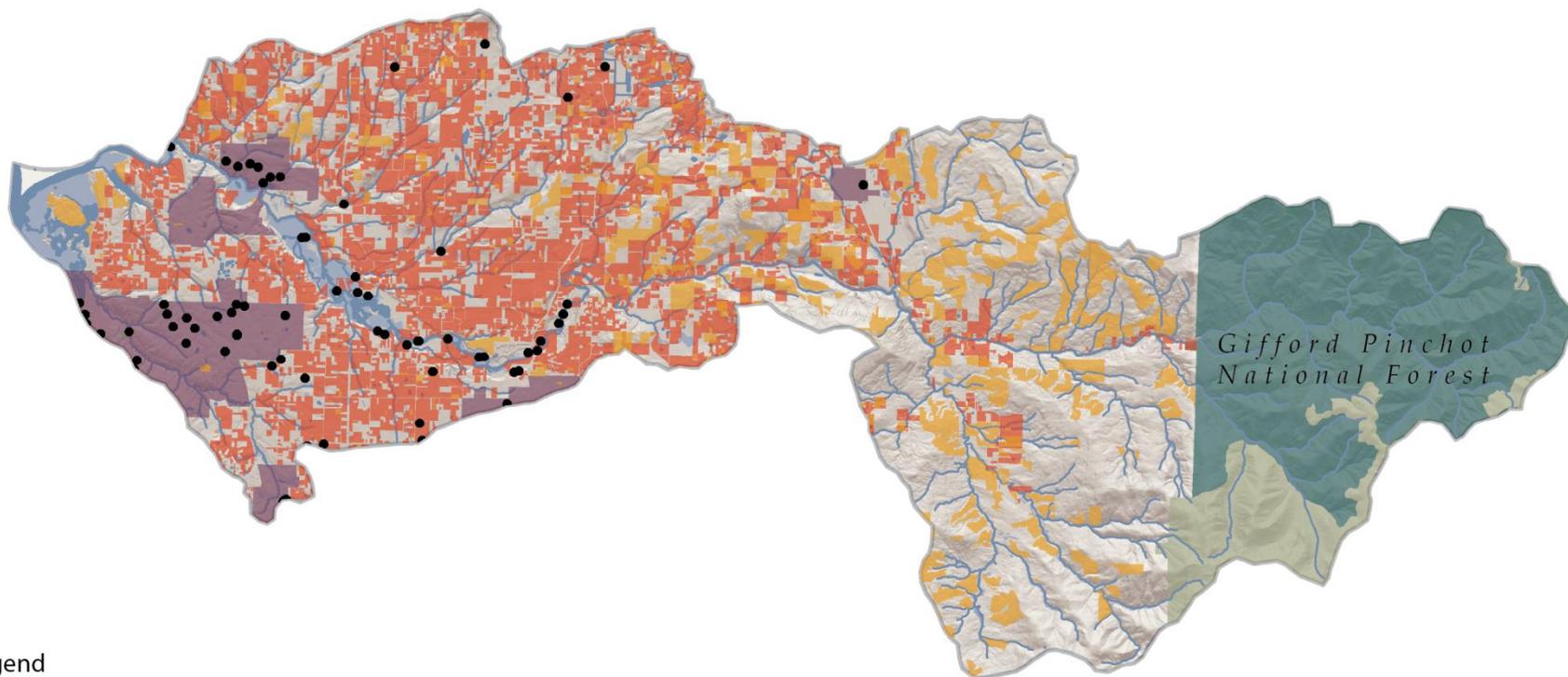


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2011



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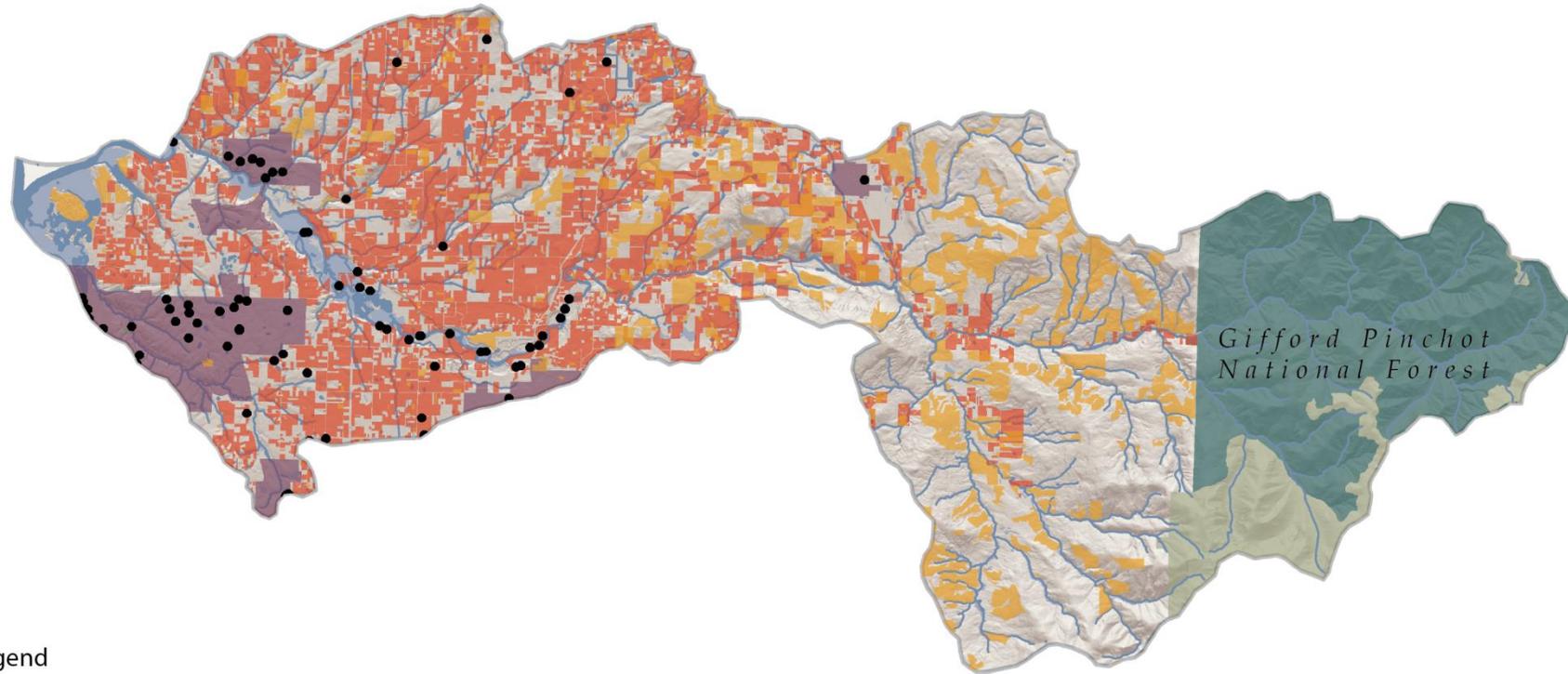
0 1.25 2.5 5 Miles

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2012



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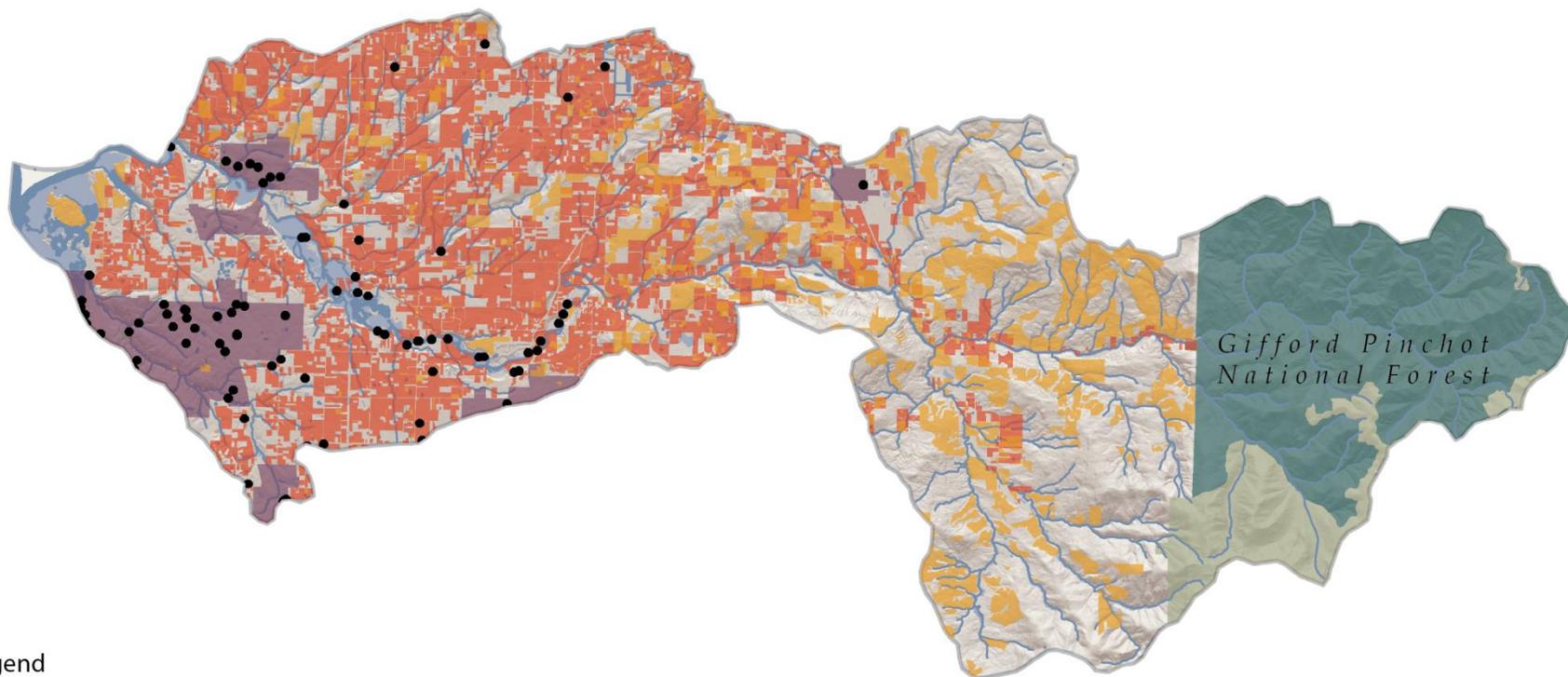
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2013



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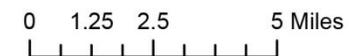
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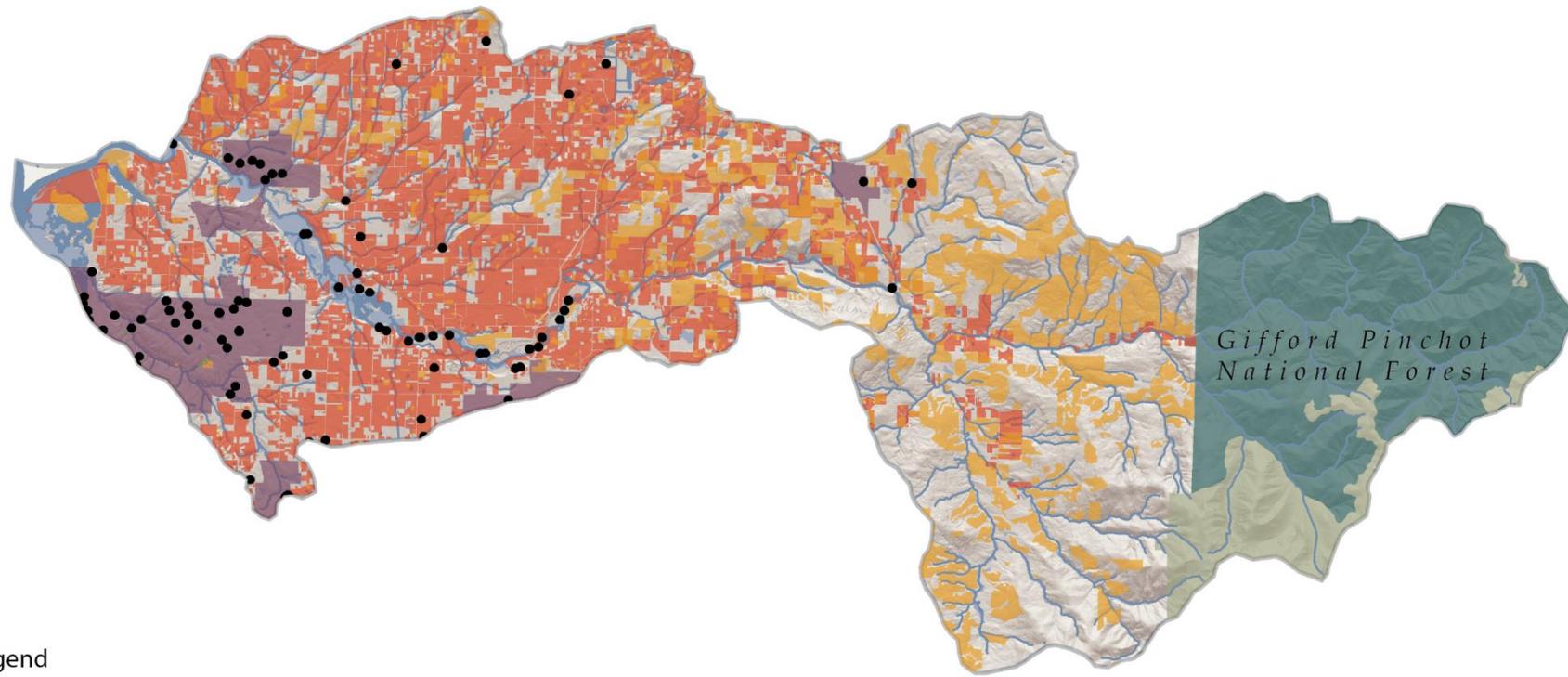


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2014



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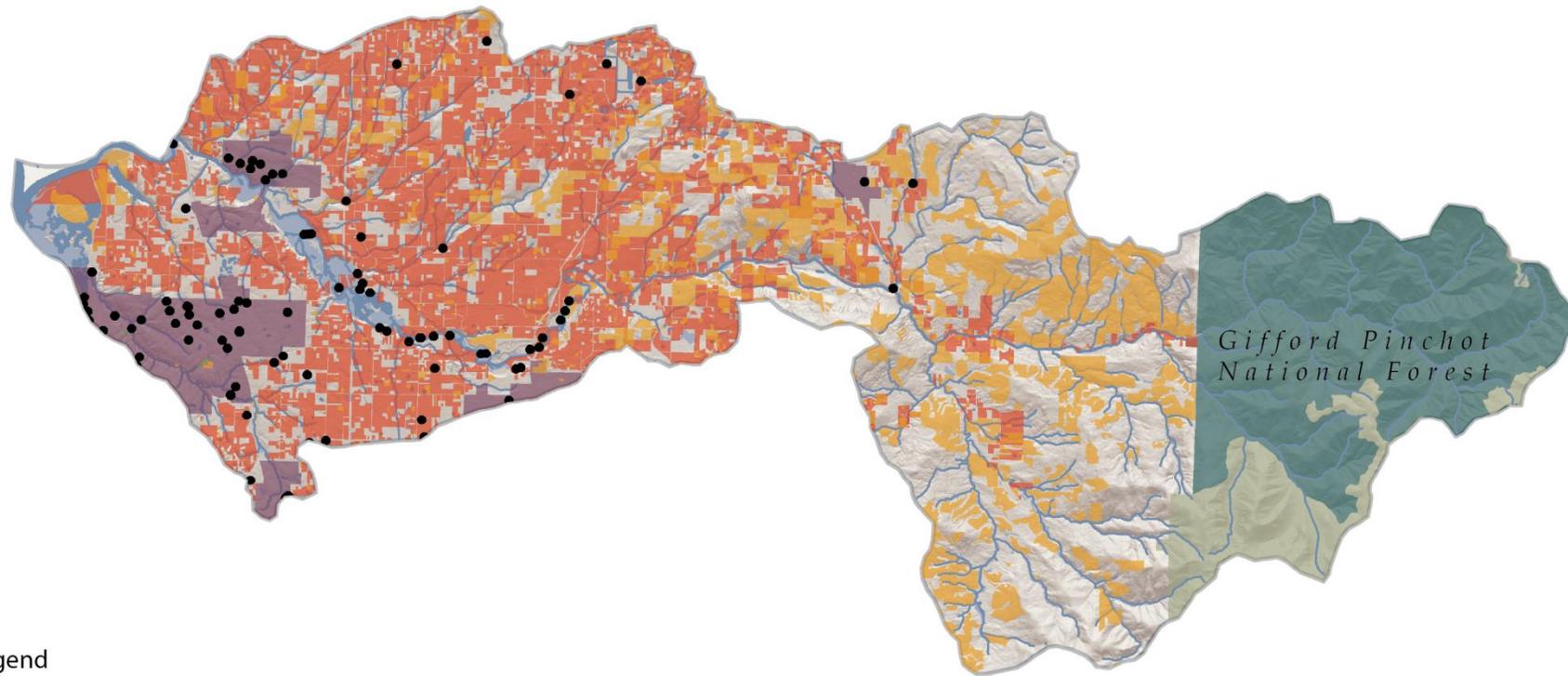
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2015



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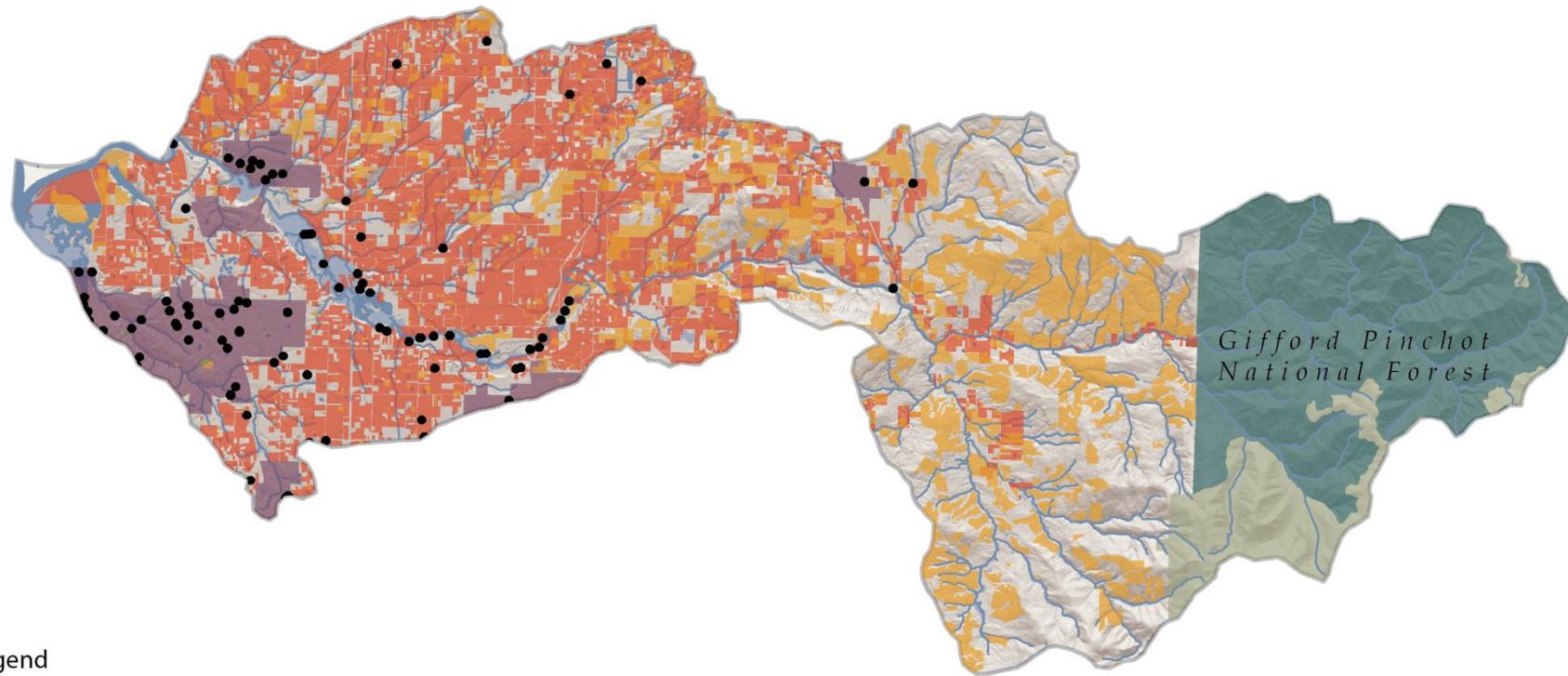
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2016



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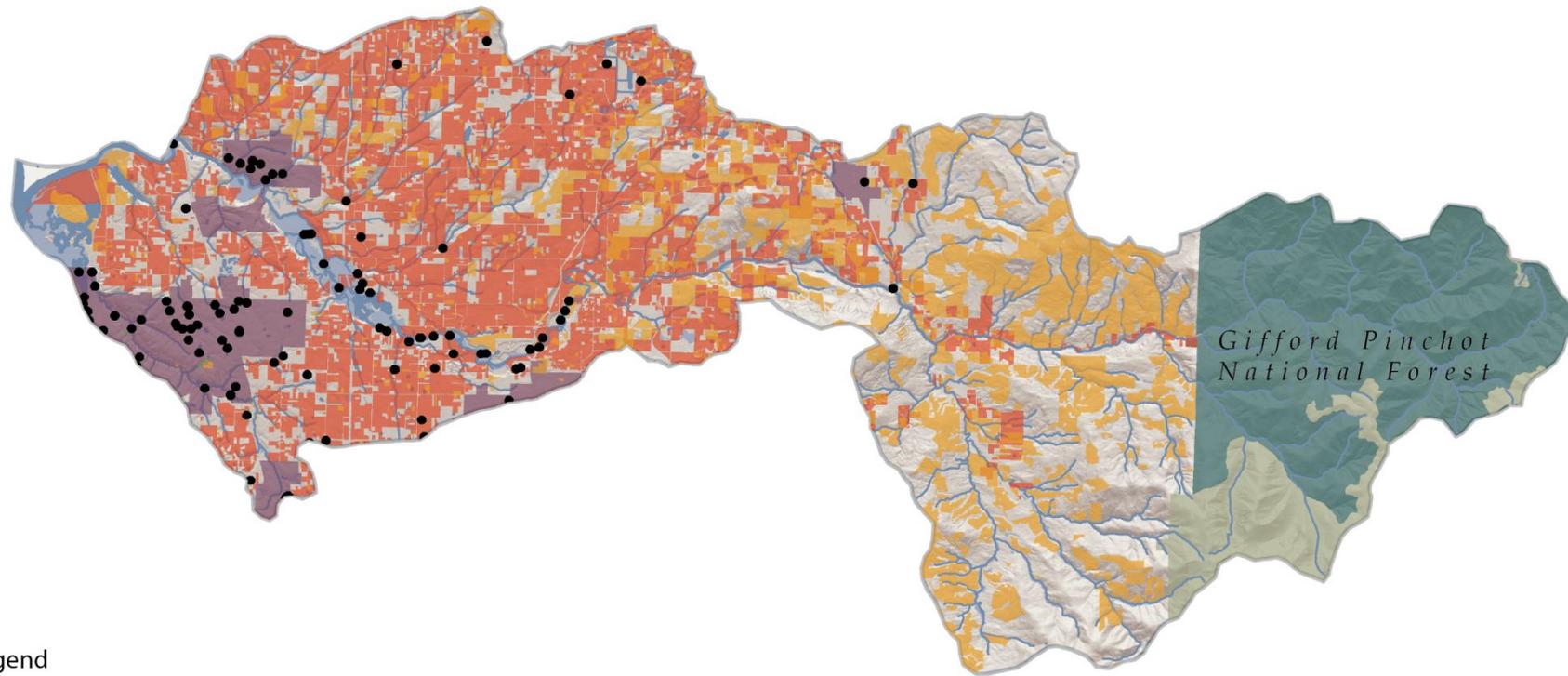
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2017



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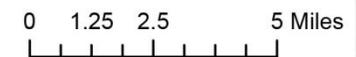
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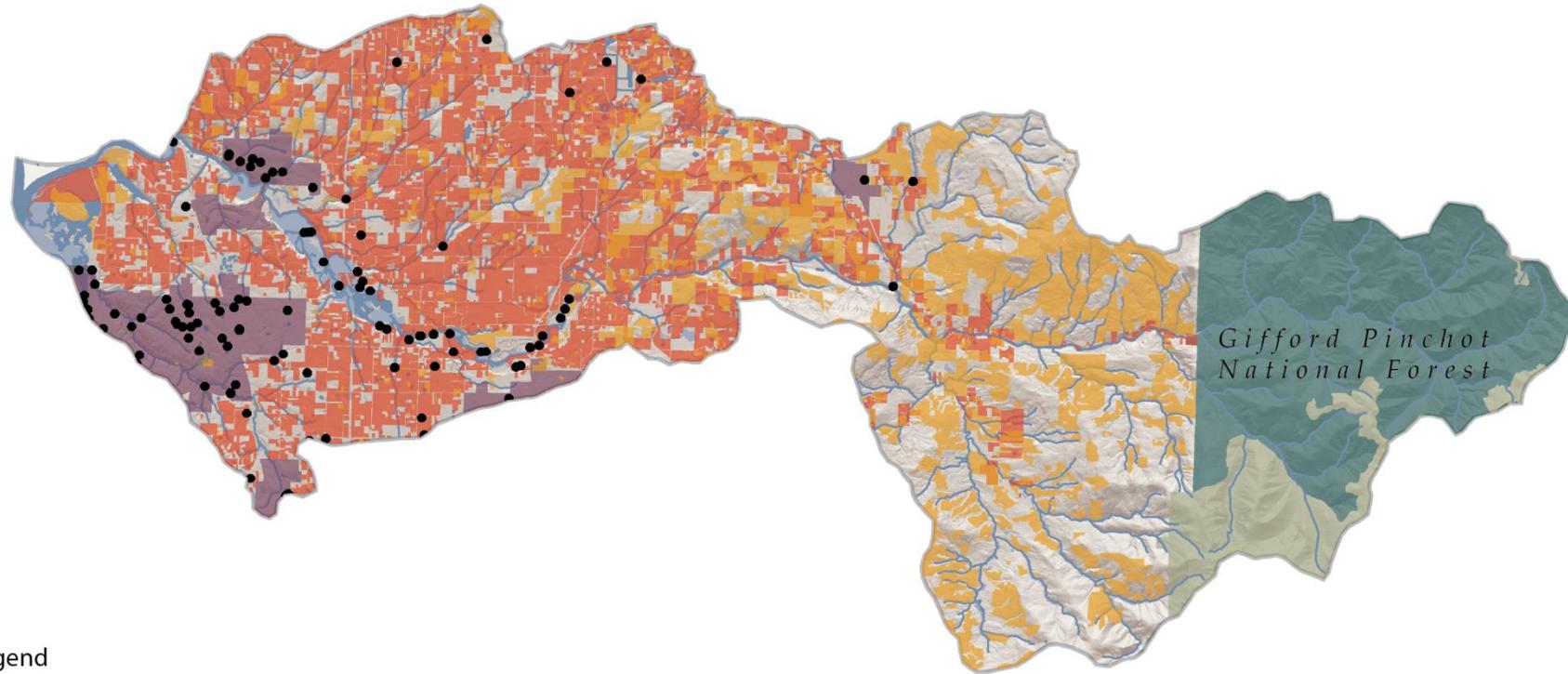


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2018



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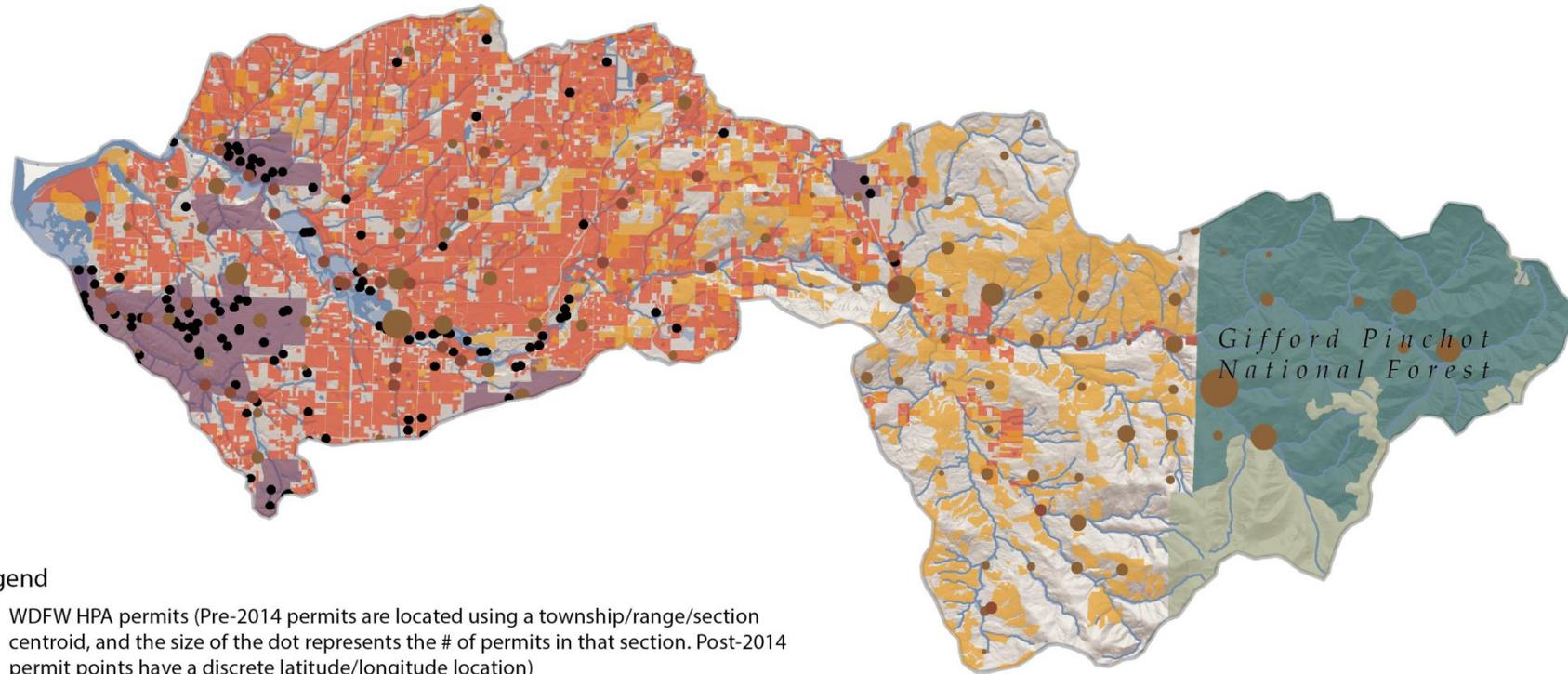
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D R A F T

2018



Legend

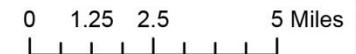
- WDFW HPA permits (Pre-2014 permits are located using a township/range/section centroid, and the size of the dot represents the # of permits in that section. Post-2014 permit points have a discrete latitude/longitude location)
- USACE Section 404 or 10 permits
- City Urban Growth Boundary

Forest Practices Application Permit Area

- Class II & III General, Class IV Special
- Class IV General
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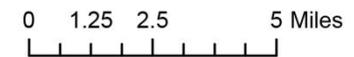
Land Cover 2001



Legend

NLCD land cover classification

 barren land	 emergent herbaceous wetlands
 cultivated crops	 evergreen forest
 deciduous forest	 grassland/herbaceous
 developed high intensity	 mixed forest
 developed low intensity	 open water
 developed medium intensity	 pasture/hay
 developed open space	 shrubscrub
	 woody wetlands

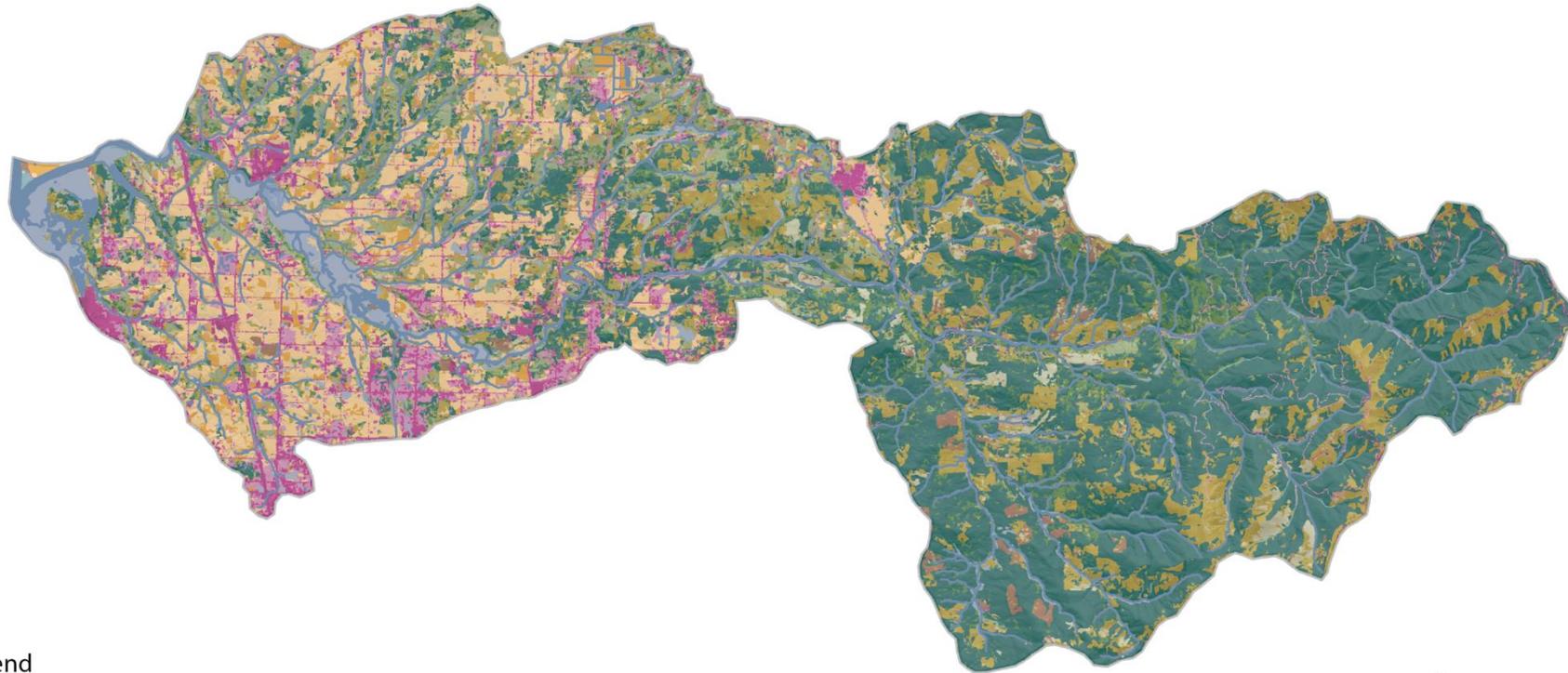


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D R A F T

Land Cover 2006



Legend

NLCD land cover classification

 barren land	 emergent herbaceous wetlands
 cultivated crops	 evergreen forest
 deciduous forest	 grassland/herbaceous
 developed high intensity	 mixed forest
 developed low intensity	 open water
 developed medium intensity	 pasture/hay
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	 woody wetlands



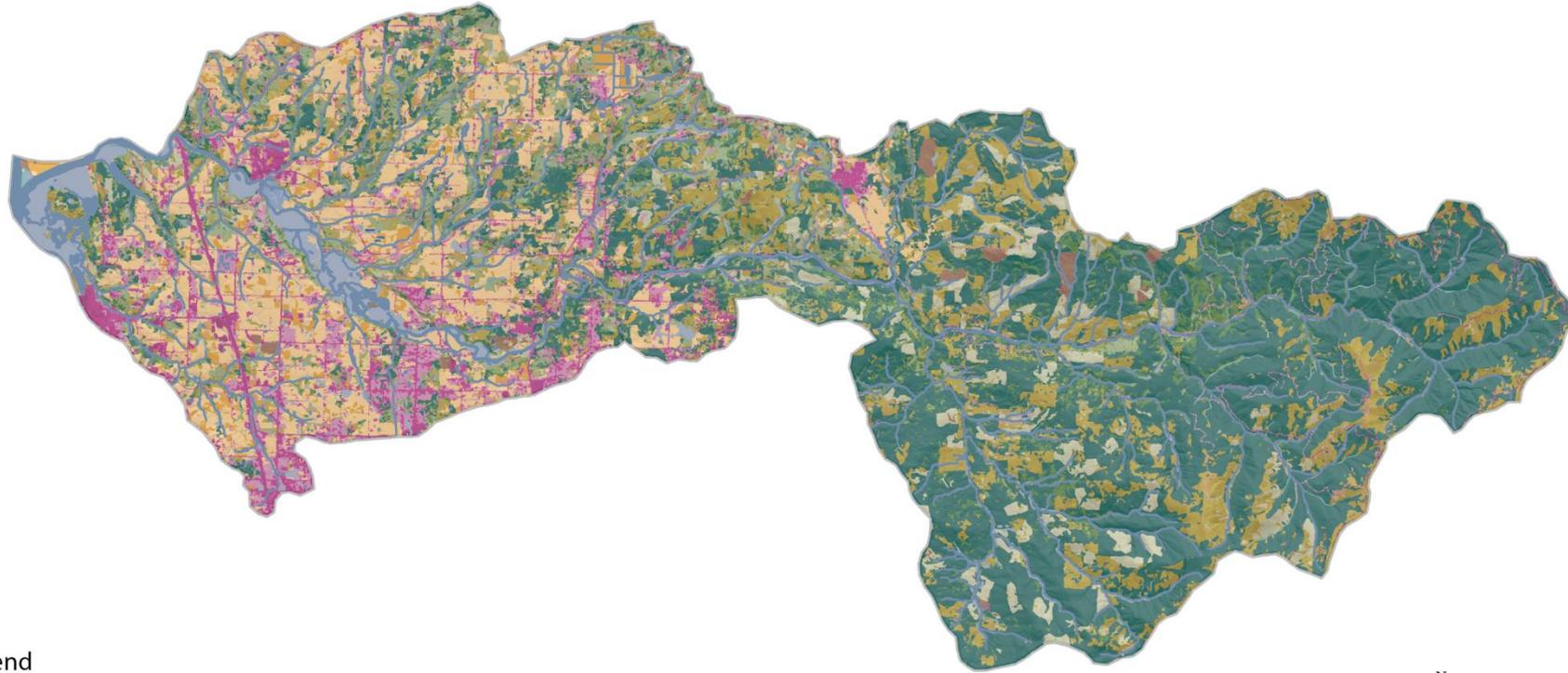
0 1.25 2.5 5 Miles

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D R A F T

Land Cover 2011



Legend

NLCD land cover classification

 barren land	 emergent herbaceous wetlands
 cultivated crops	 evergreen forest
 deciduous forest	 grassland/herbaceous
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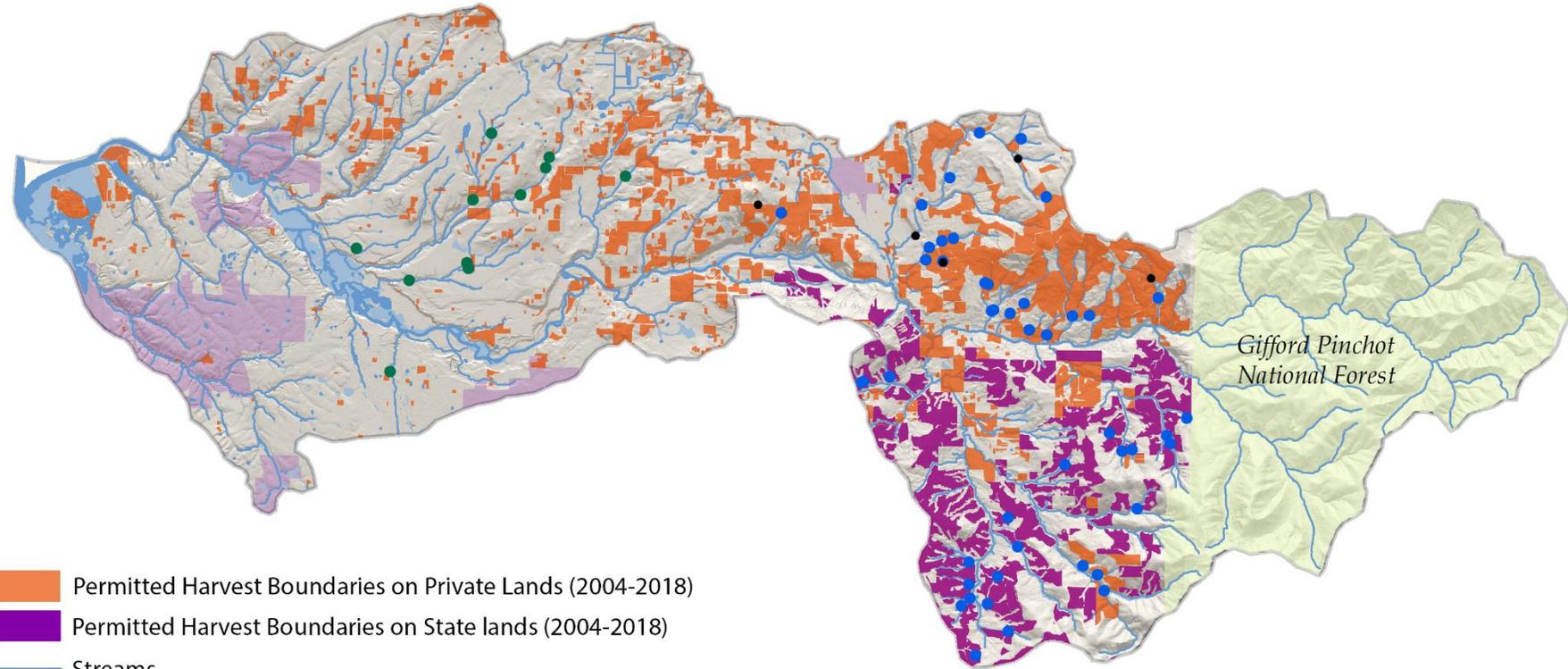


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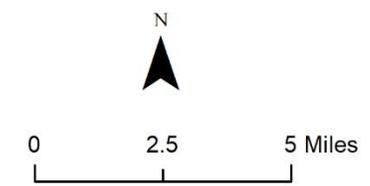
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East Fork Lewis River DNR Forest Practices and State Trust HCP Harvests and RMAP and FFFPP

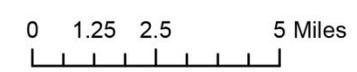
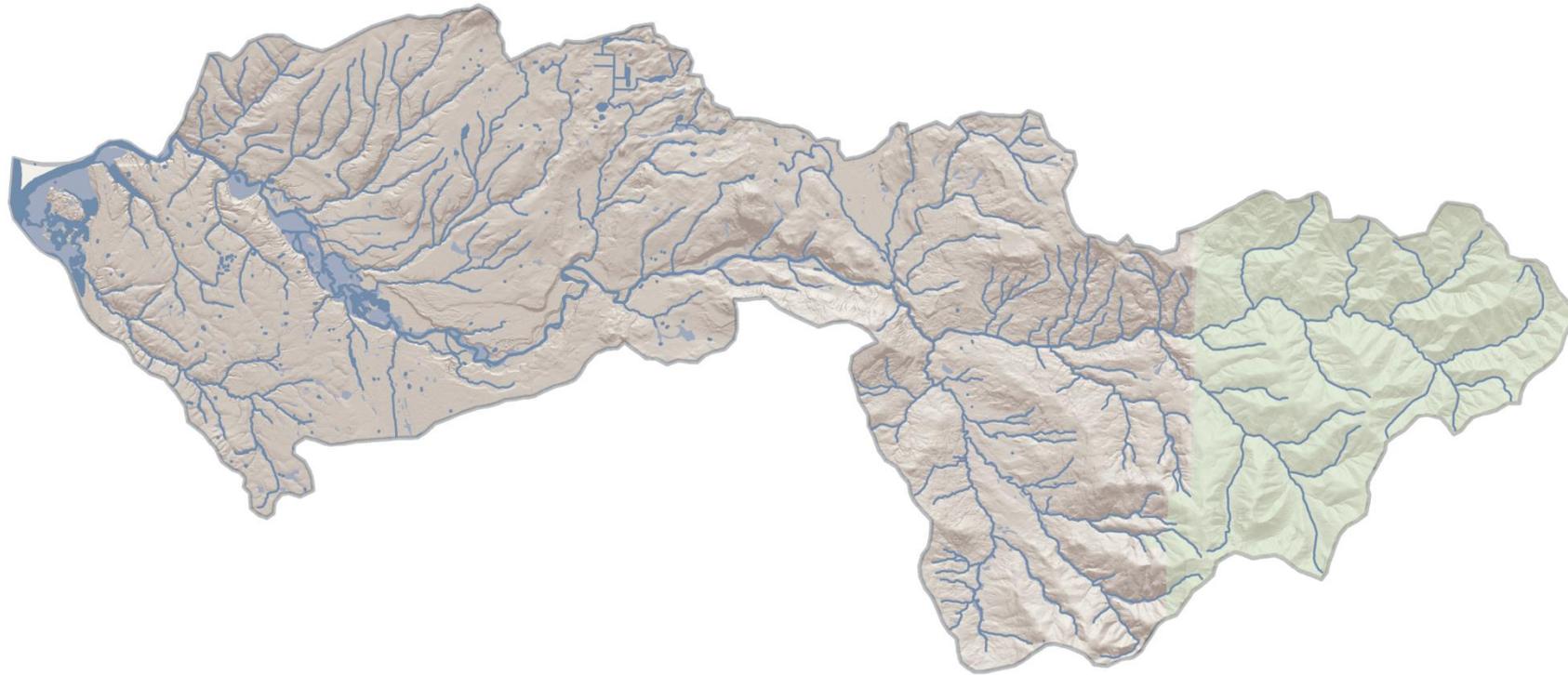


- Permitted Harvest Boundaries on Private Lands (2004-2018)
- Permitted Harvest Boundaries on State lands (2004-2018)
- Streams
- Water Bodies
- Wetlands
- City Urban Growth Boundaries
- FFFPP Barrier Upgrades
- RMAP Fish Barrier Upgrades**
 - Fish Barrier (none)
 - Fish Passable
 - No Fish



D R A F T

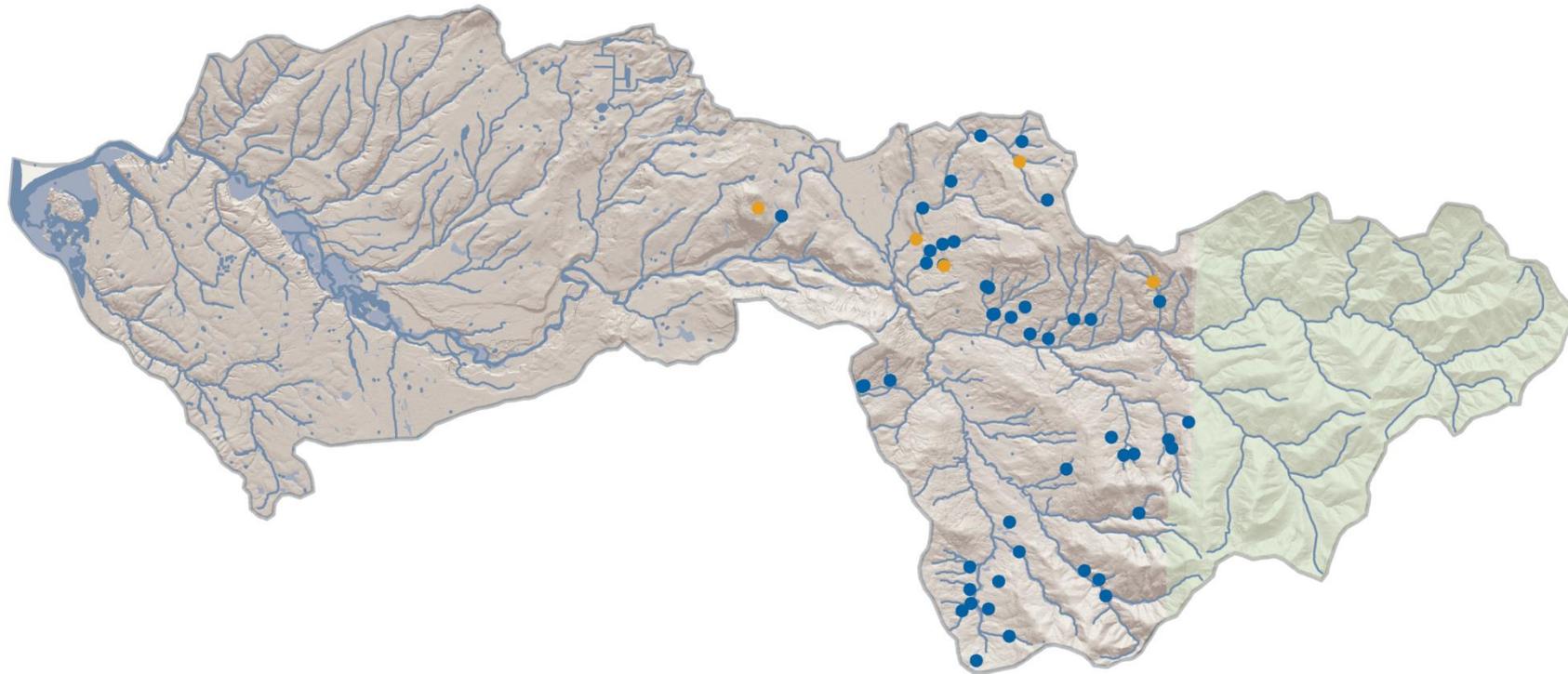
Barrier Status



D R A F T

Barrier Status

RMAP



Legend

Barrier Status

- Passable
- Barrier
- No Fish
- Partial barrier
- Unknown

■ Gifford Pinchot National Forest



0 1.25 2.5 5 Miles

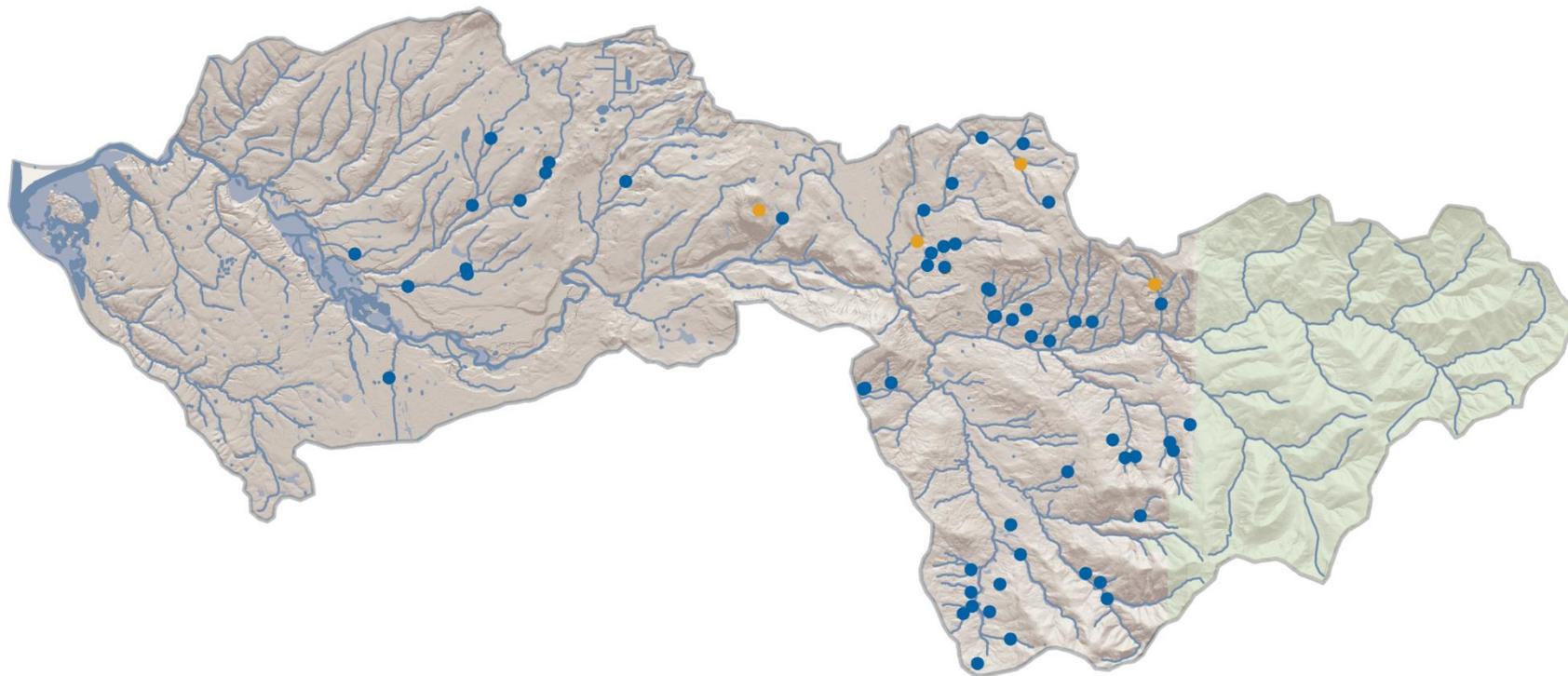
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D R A F T

Barrier Status

RMAP + FFFPP



Legend

Barrier Status

- Passable
- Barrier
- No Fish
- Partial barrier
- Unknown

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0 1.25 2.5 5 Miles

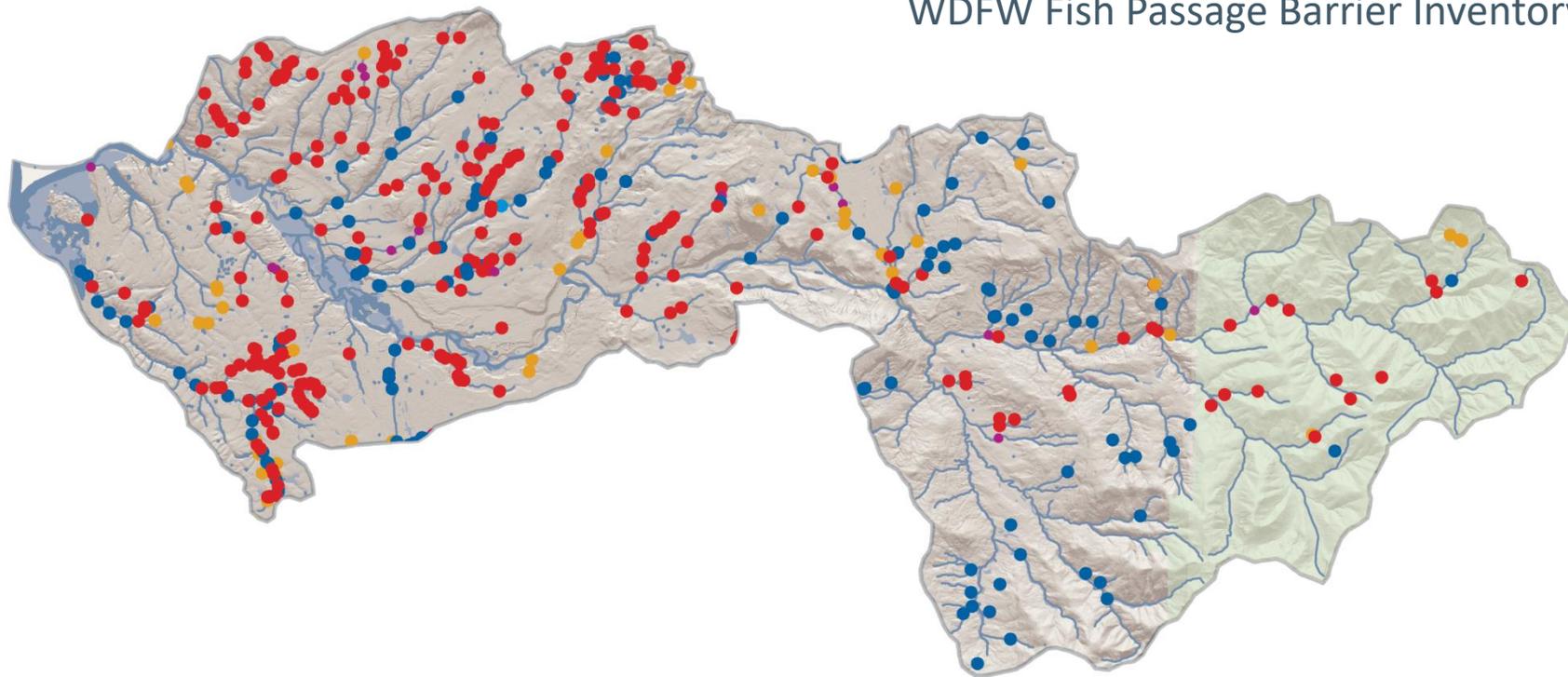
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Barrier Status

RMAP + FFFPP +
WDFW Fish Passage Barrier Inventory

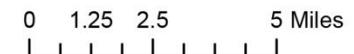


Legend

Barrier Status

- Passable
- Barrier
- No Fish
- Partial barrier
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■ Gifford Pinchot National Forest

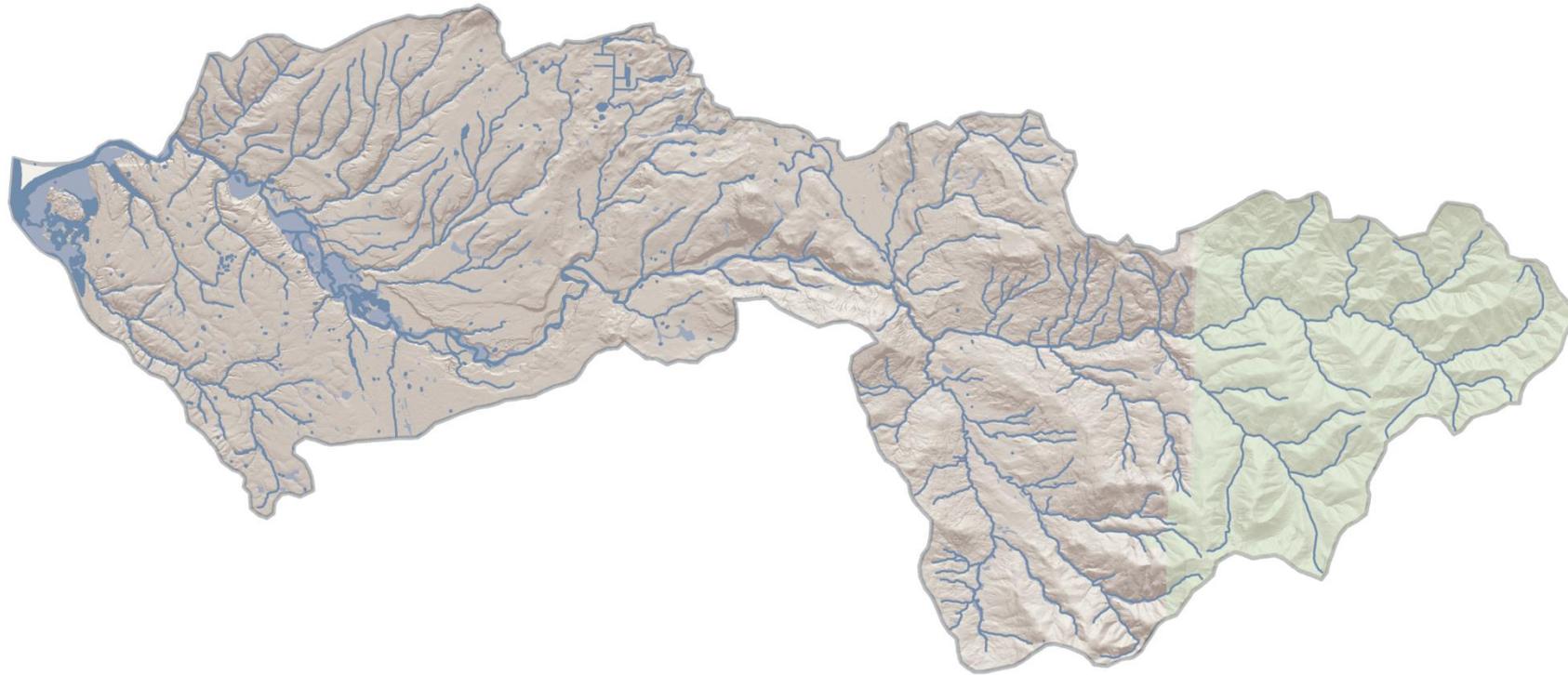


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Conservation & Restoration



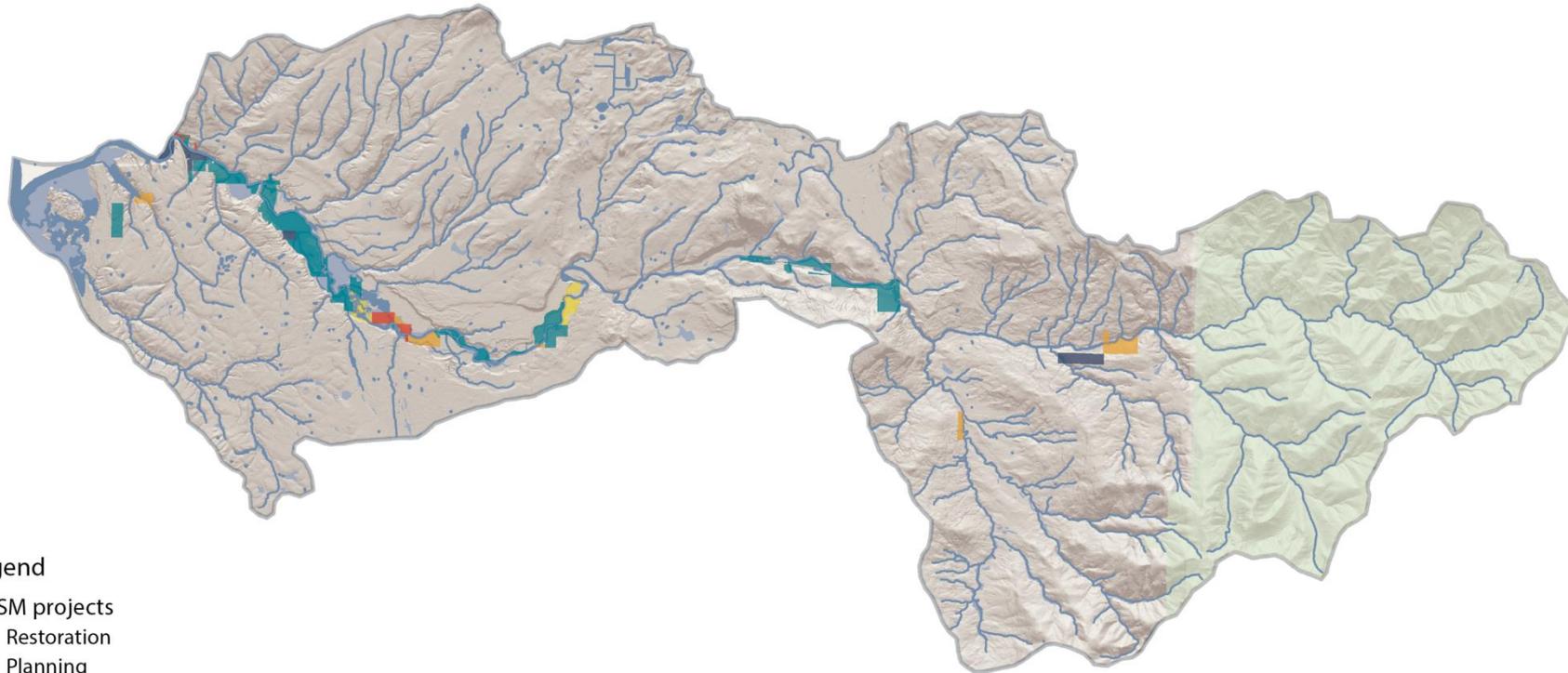
0 1.25 2.5 5 Miles

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Conservation & Restoration



Legend

PRISM projects

- Restoration
- Planning
- Acquisition & Restoration
- Research
- Acquisition

Conservation Land Base

- Clark County
- Columbia Land Trust
- Clark County Public Works
- Washington State
- Private
- Gifford Pinchot National Forest

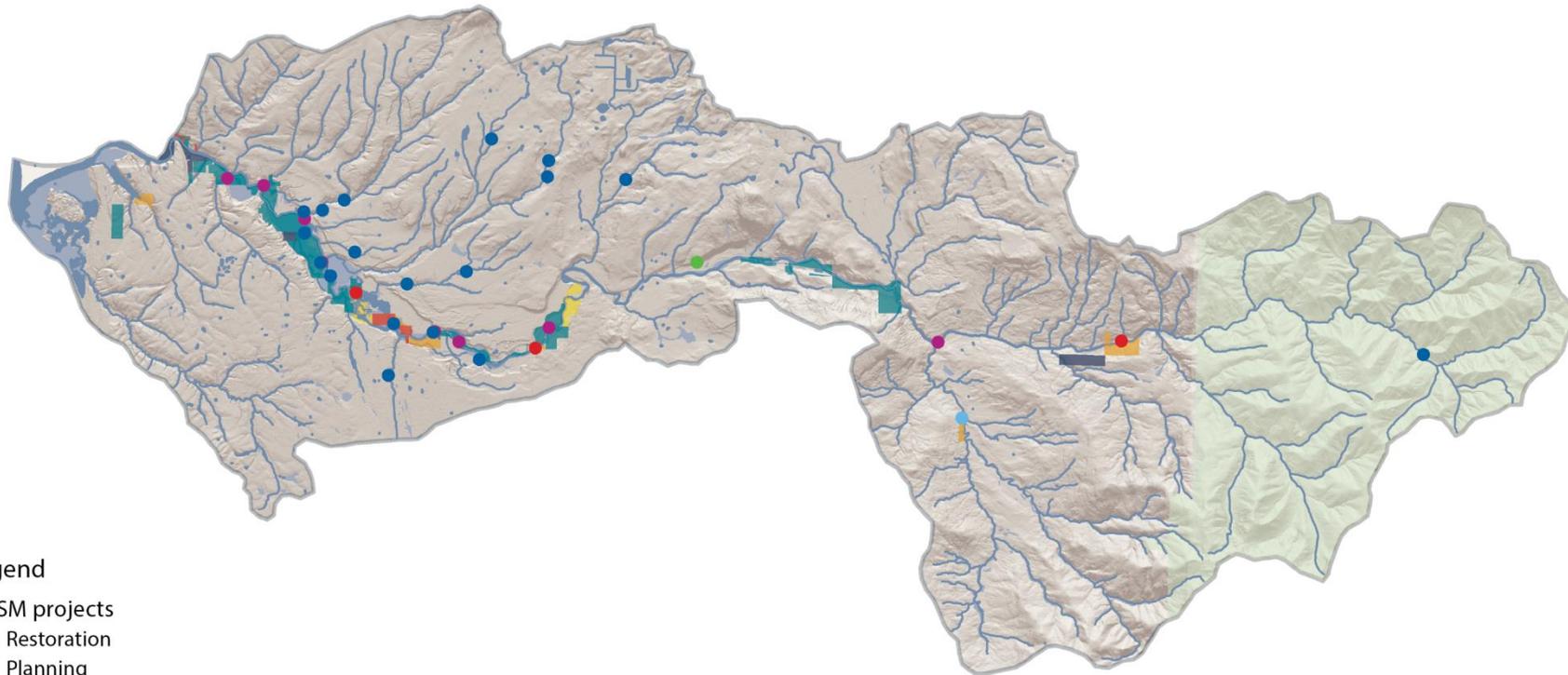


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Conservation & Restoration



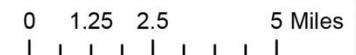
Legend

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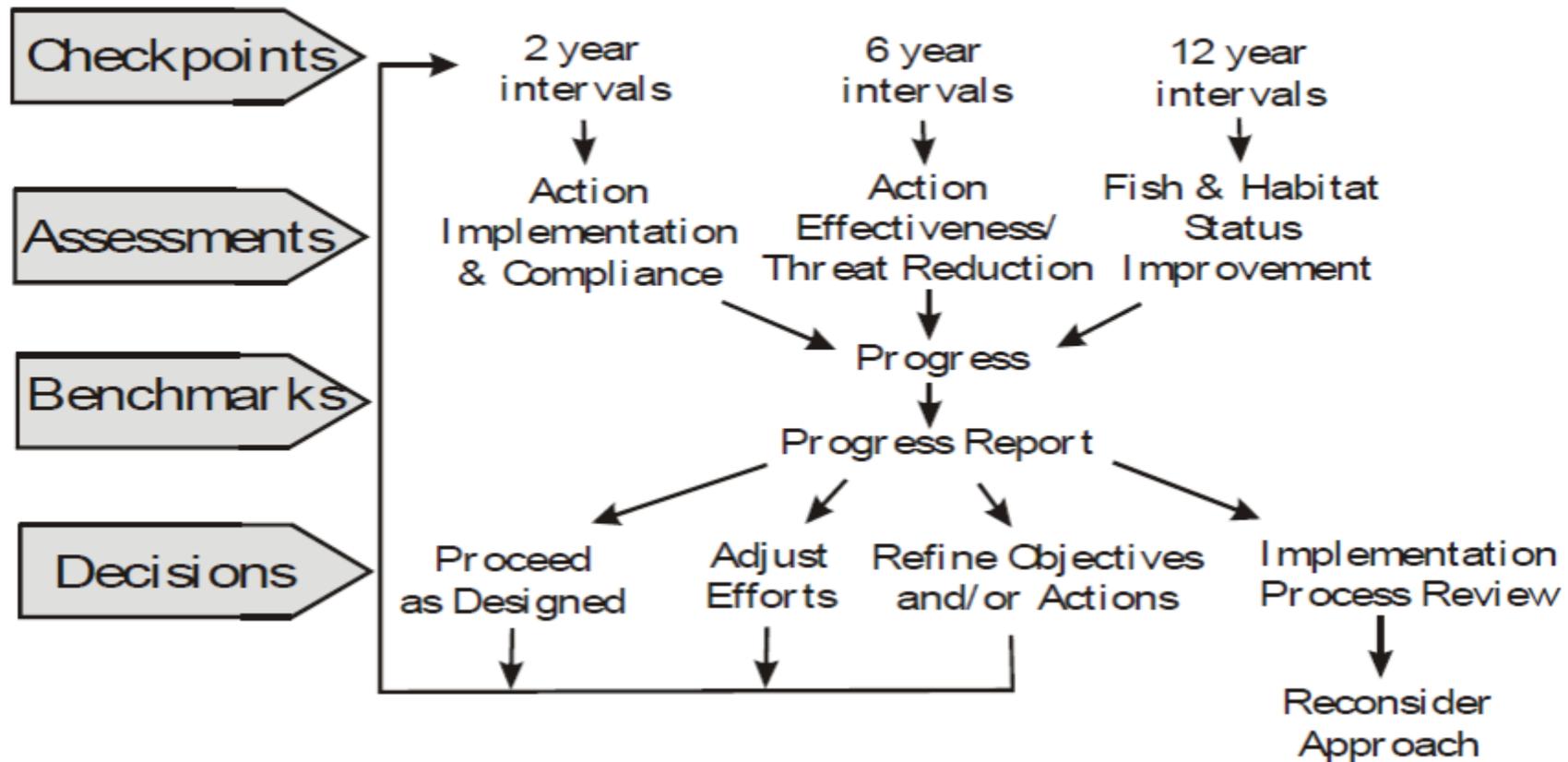
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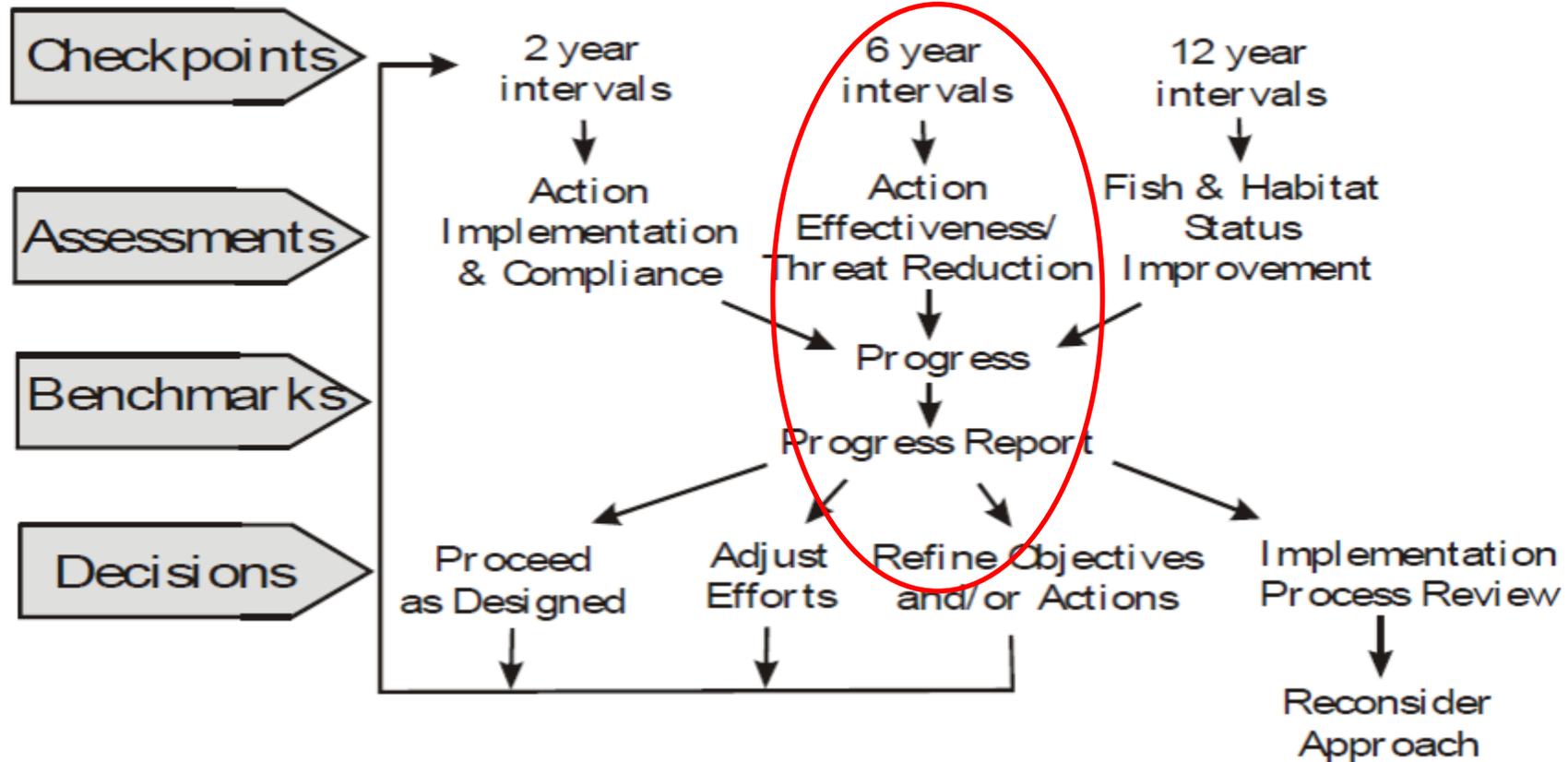
Adaptive Management

Adaptive Management Process



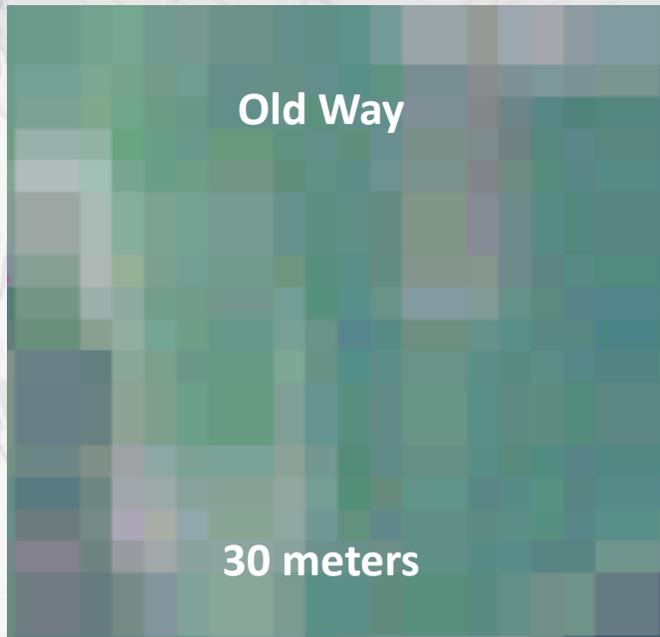
Adaptive Management

Adaptive Management Process



LCFRB Adaptive Management Actions

- High Resolution Change Detection (HRCDD)
 - Contract with WDFW for EFLR HRCDD





Hydraulic Code Implementation Citizen Advisory Group (HCICAG) Charter

February 6, 2019

Background

The WDFW Habitat Program Protection Division is charged with guiding implementation of the state's hydraulic code, Chapter 77.55 RCW - Construction Projects in State Waters. The hydraulic code authorizes WDFW to issue a permit - the Hydraulic Project Approval (HPA) - to ensure that actions affecting the bed or flow of state waters provide adequate means for the protection of fish life. Hydraulic code rules have been adopted to guide implementation of the HPA program and inform citizens about the measures typically required to provide protection of fish life.

Day-to-day implementation of the HPA program is a team effort involving Protection Division staff (located at WDFW headquarters in Olympia), who are engaged in statewide and cross-regional topics as well as handling submitted applications, and regional staff, who review permit applications and issue HPA permits.

Objectives of the Protection Division include to maintain and improve consistency and effectiveness of the HPA Program; improve the soundness of permits and rules; and improve outcomes for fish and people. To do this, Protection Division develops rule language, conducts the rule making process, engages in legislative issues including bill analysis and response to legislative inquiries, and develops and maintains statewide guidance, training, and tools to support staff implementing the HPA Program. Protection Division also reviews submitted applications for completeness, manages the HPA database, and administers informal appeals of HPA decisions.

HCICAG Purpose

The purpose of the HCICAG is to provide input to Washington Department of Fish and Wildlife (WDFW) HPA Program staff on operations of the HPA Program in order to 1) maintain and improve consistency and effectiveness of the HPA Program; 2) improve the soundness of permits; 3) increase understanding of the public about the importance of the HPA in protecting fish life, and 4) improve outcomes for fish and people.

HCICAG Objectives

Within the context of resource and people priorities set by WDFW, the HCICAG provides input on the effectiveness of the HPA program in such areas as procedures, transparency, consistency, outcomes, compliance, and communications/outreach. Fish protections that can be improved through operational measures without changes to rule or statute will also be posed for input from HCICAG.