North Santiam River

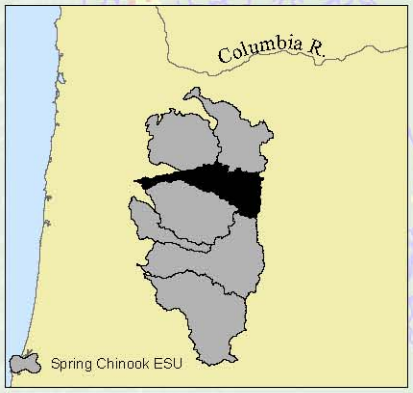
Accessibility

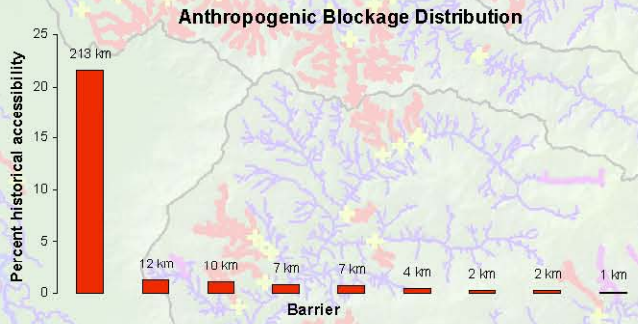
- Current accessibility
- Historical accessibility
- Above natural barriers
- Historically Inaccessible

0 9 18 27
Km

Upper Willamette Spring Chinook Salmon

Santiam River
Morgan Creek
Marion Creek
Main Canal
Valentine Creek
Stout Creek
Little North Santiam River
Gold Creek
Cedar Creek
Green Creek
Mad Creek
Rock Creek
Kinney Creek
Big Cliff Dam
Detroit Dam
Breitenbush River
Devils Creek
Boulder Creek
Whitewater Creek
Milk Creek
Pamelia Creek
Blowout Creek
Minto Creek
Straight Creek
Mist Creek
Camp Creek
North Santiam River





Accessibility	Stream km	% total
Current accessibility	527	53
Historical accessibility	797	80
Above natural barriers	194	20
Total streams	992	
Current / Historical		**66**

1:540,000

North Santiam River

North Santiam River

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0 9 18 27
Km

Upper Willamette Winter Steelhead

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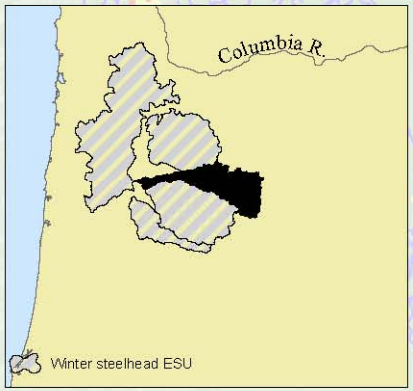

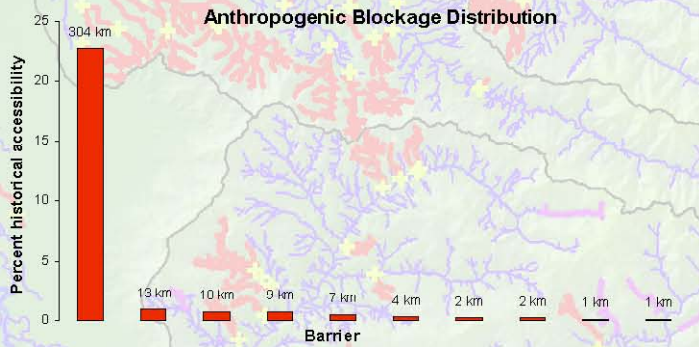

Accessibility	Stream km	% total
Current accessibility	650	49
Historical accessibility	1,017	76
Above natural barriers	323	24
Total streams	1,339	
Current / Historical		**64**

1:540,000

North Santiam River
2002 303(d) Listed Water Courses

PARAMETER

- Dissolved Oxygen
- Temperature

CRITERIA

- Spawning: 11 mg/L o
- Spawning: 12.8 C
- Rearing: 17.8 C
- Historically Inaccessible

0 9 18 27
Km

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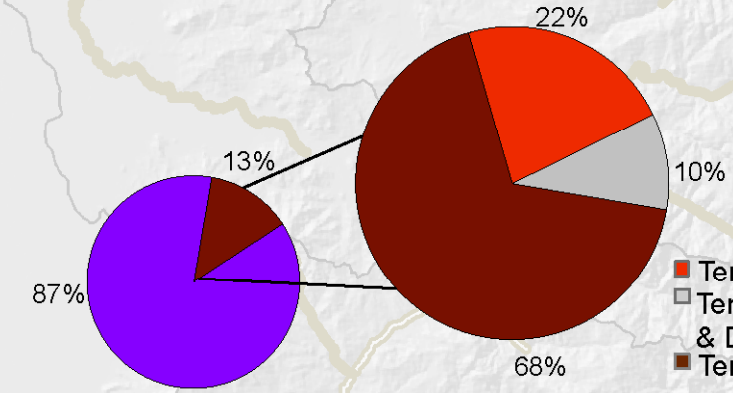
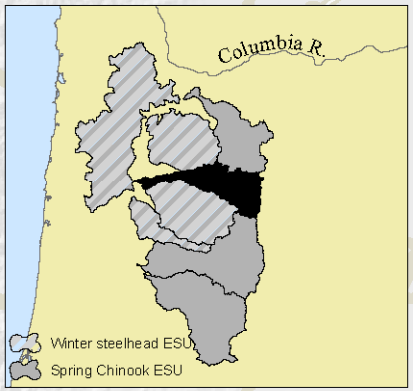
North Santiam River

Total 303(d) Streams = 13% Total 100k Streams



- Temperature, Rearing: 17.8 C & Temperature, Spawning: 12.8 C
- Temperature, Rearing: 17.8 C & Temperature, Spawning: 12.8 C & Dissolved Oxygen, Spawning: 11mg/L o
- Temperature, Rearing: 17.8 C

- Total 303(d) streams - 192.68 km
- Remaining 100k streams - 1,269 km



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North Santiam River

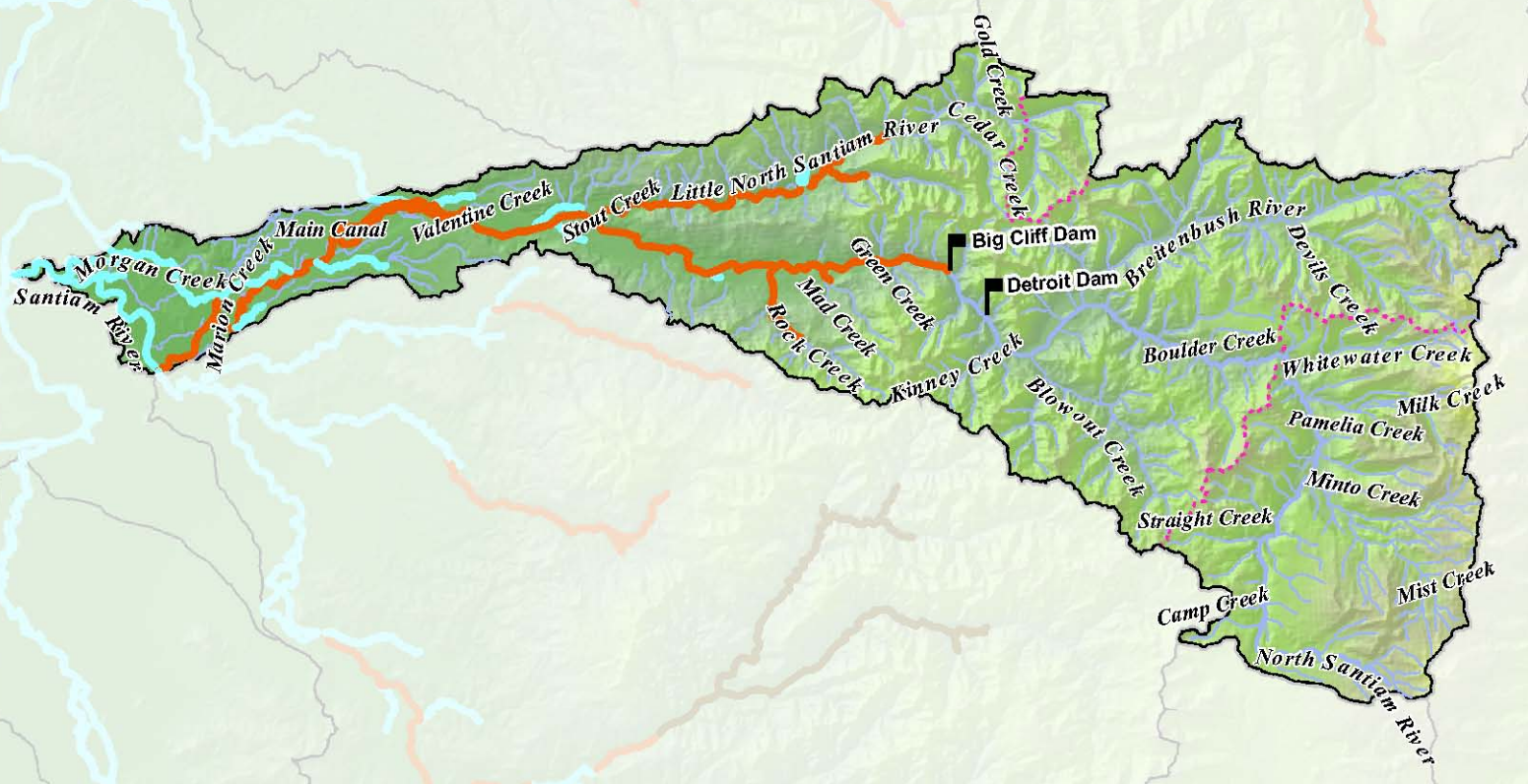
North Santiam River

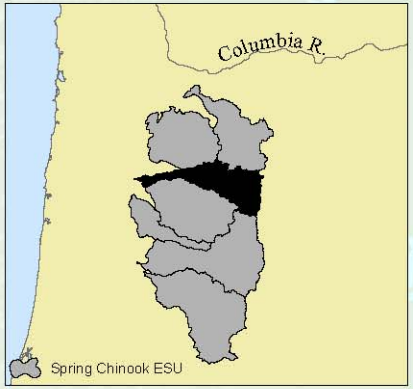
ODFW Distribution

- Spawning and rearing
- Rearing and migration
- Migration
- Previous/Historical
- Present, unknown use
- Absent
- Disputed
- Historically Inaccessible

0 9 18 27 Km

Upper Willamette Spring Chinook Salmon





Use type	Stream km	% total
Spawning and rearing	129	9
Rearing and migration	69	5
Total use	198	14
Total 100k streams	**1,462**	**100**

1:540,000

North Santiam River
ODFW Distribution

- Spawning and rearing
- Rearing and migration
- Migration
- Previous/Historical
- Present, unknown use
- Absent
- Disputed
- Historically Inaccessible

0 9 18 27
Km

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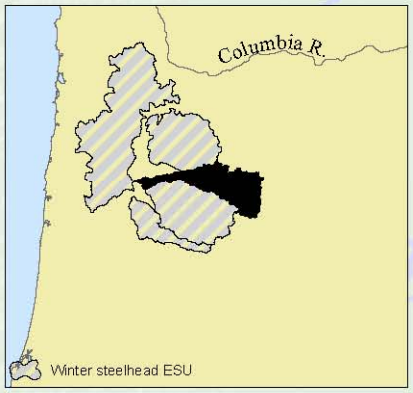


Use type	Stream km	% total
Spawning and rearing	157	11
Rearing and migration	59	4
Previous / historical	41	3
Total use	257	18
Total 100k streams	**1,462**	**100**

1:540,000

North Santiam River

North Santiam River

FEMA Q3 Flood Data

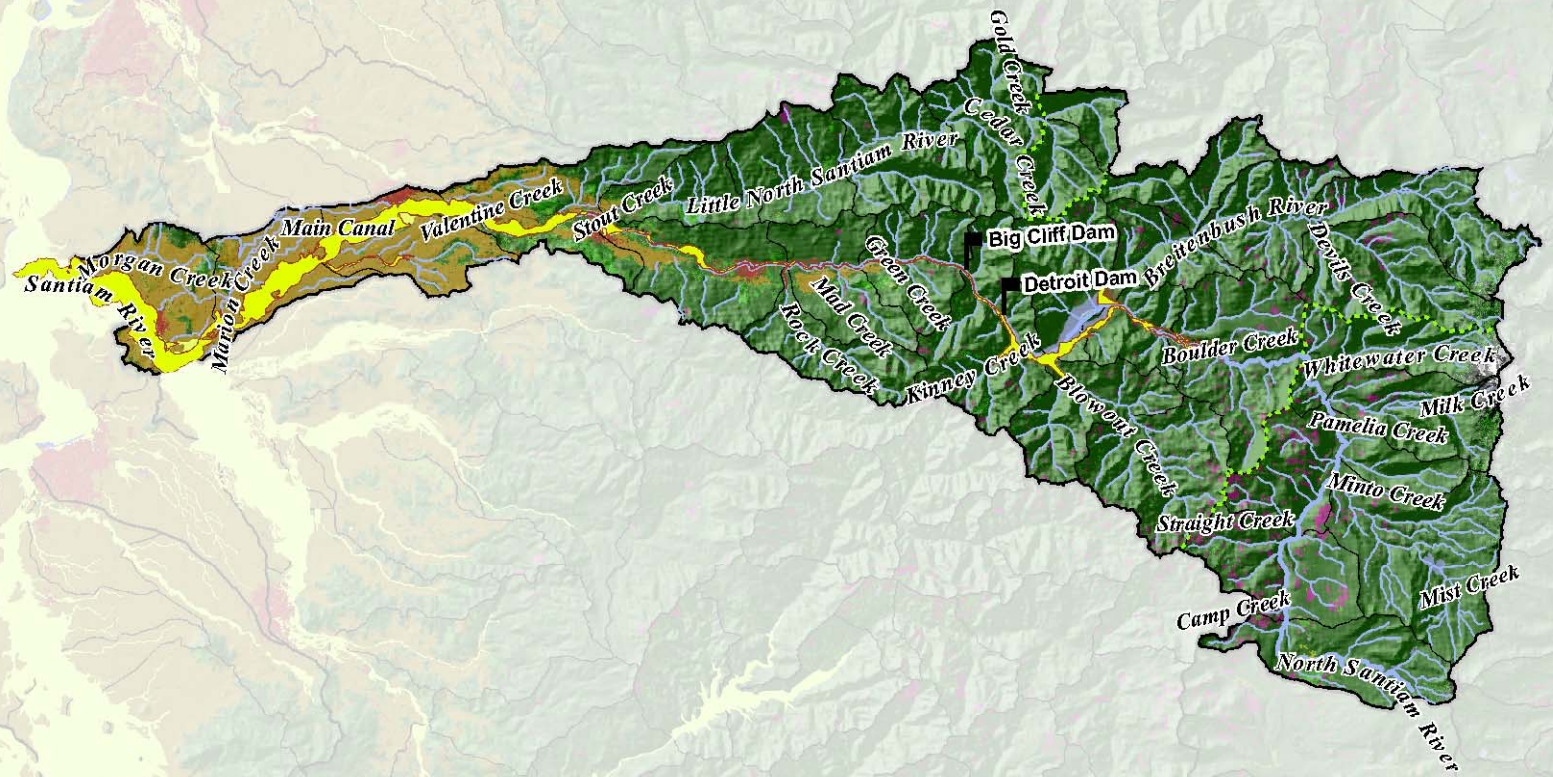
Flood plain

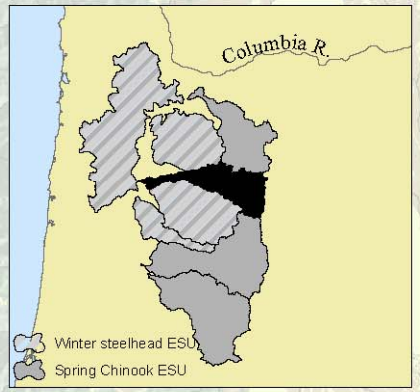
Historically Inaccessible

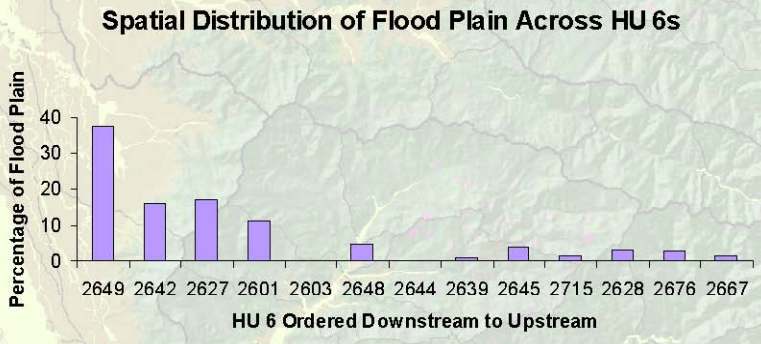
0 9 18 27

Km

Upper Willamette Winter Steelhead
Upper Willamette Spring Chinook Salmon







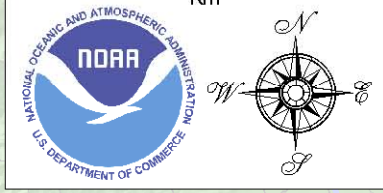
Flood Plain Land Cover	Square Km	Pecent Total
Lakes and streams	11	15
Rock, sand and clay	<1	<1
Sparse vegetation in transition/recovery	<1	<1
Grasslands	3	4
Developed	1	1
Forest and shrubs	22	30
Agriculture	34	46
Wetlands	3	4
Total 100 yr. Flood Plain	**74**	**100**

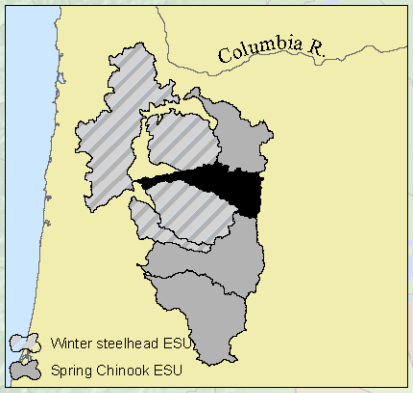
1:540,000

North Santiam
2000 HU 6
Population Density

- 0 - 6
- 7 - 17
- 18 - 33
- 34 - 51
- 52 - 77
- 78 - 126
- 127 - 204
- 205 - 275
- 276 - 436
- 437 - 806
- 807 - 1505
- 1506 - 2327
- 2328 - 3002
- Historically Inaccessible

0 9 18 27
Km





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North Santiam River

Year	Total Human Population / Square Km	Total Human Population	% Increase
2000	9	18,027	
2040	14	27,624	53

1:540,000

North Santiam River

North Santiam River

Land Cover

Lakes and streams
Ice and snow
Rock, sand, or clay
Sparse vegetation
Grassland
Developed
Forest and shrubs
Agriculture
Wetlands
Historically Inaccessible

0 9 18 27
Km

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

N W E S

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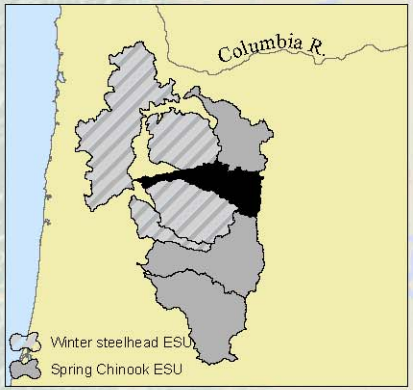


Land Cover	Watershed Polygon Square Km	Watershed Polygon % Area	Historically Accessible Square Km	Historically Accessible % Area
Lakes and streams	24	1	20	1
Ice and snow	4	<1	<1	<1
Rock, sand and clay	20	1	6	<1
Sparse vegetation	48	2	25	2
Grasslands	70	4	56	4
Developed	12	1	12	1
Forest and shrubs	1,595	81	1,138	78
Agriculture	200	10	200	14
Wetlands	6	0	5	<1
Total	**1,978**	**100**	**1,462**	**100**

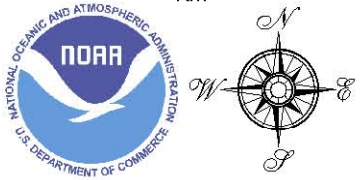
1:540,000

North Santiam River

Land Use

- Agriculture - forest zone
- Agriculture
- Forest
- Mineral resource zone
- Conservation zone
- Park and recreation
- Public facility
- Rural commercial
- Rural industrial
- Rural residential
- Urban
- Water
- Historically Inaccessible

0 9 18 27
Km



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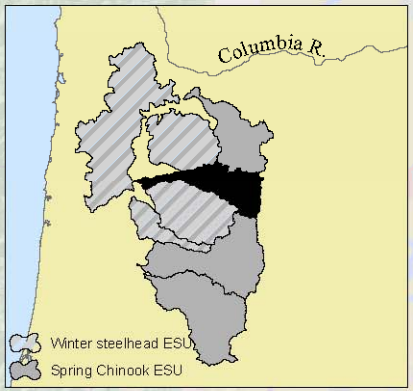

Land Use	Watershed Polygon Square Km	Watershed Polygon % Area	Historically Accessible Square Km	Historically Accessible % Area
Ag-Forest zone	34	2	34	2
Agriculture	227	11	227	16
Forest	1,671	84	1,156	79
Park and recreation	2	<1	2	<1
Public facility	1	<1	1	<1
Rural industrial	1	<1	1	<1
Rural residential	20	1	20	1
Urban	23	1	23	2
Total	**1,978**	**100**	**1,463**	**100**

1:540,000

North Santiam River

North Santiam River

Ownership

- County
- Federal
- Private
- State
- Historically Inaccessible

0 9 18 27
Km

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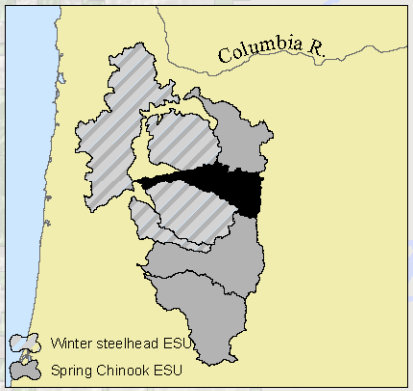

Ownership	Watershed Polygon Square Km	Watershed Polygon % Area	Historically Accessible Square Km	Historically Accessible % Area
County	<1	<1	<1	<1
Federal	1,285	65	783	54
Private	573	29	559	38
State	121	6	121	8
Total	**1,978**	**100**	**1,463**	**100**

1:540,000

North Santiam River

Riparian Condition

- Functional
- Impaired
- Moderately impaired
- No Data
- Water
- Historically Inaccessible

0 9 18 27
Km

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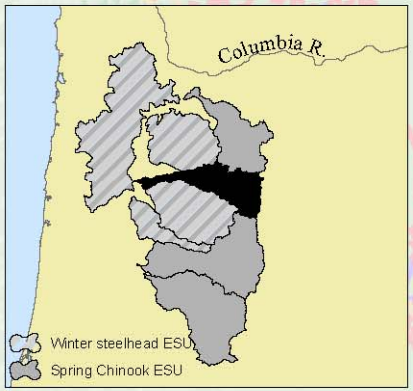


Riparian condition	Stream km	% total
Functional	837	62
Impaired	318	24
Moderately impaired	176	13
No data	8	1
Water	1	<1
Total	**1,339**	**100**

1:540,000

North Santiam River

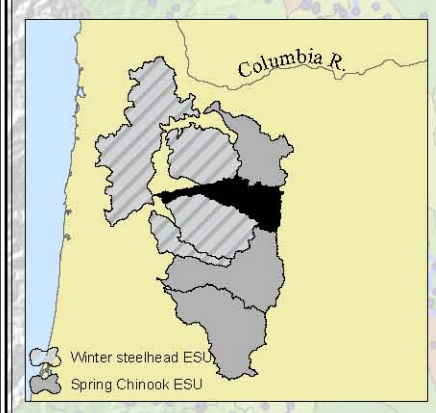
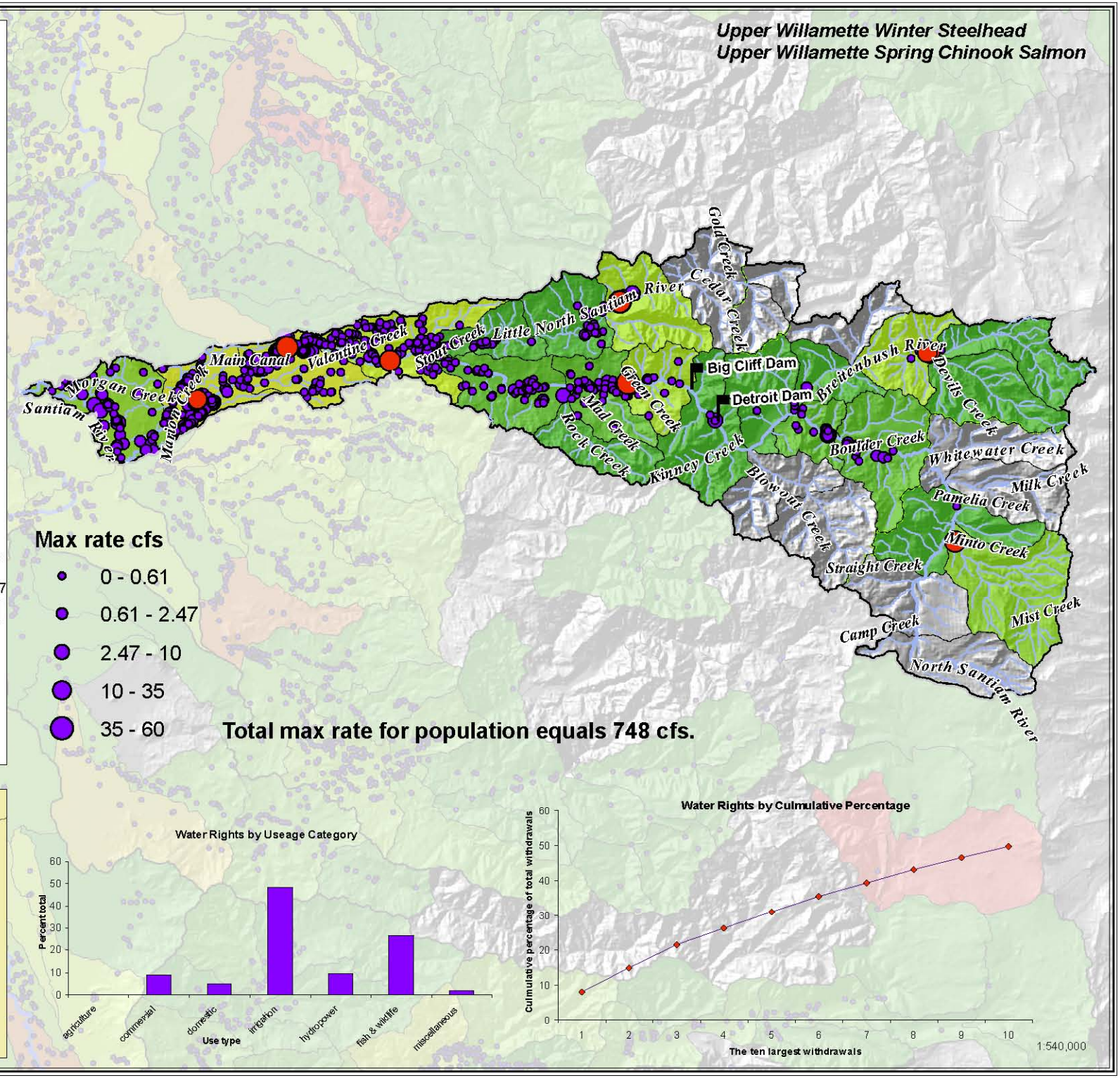
North Santiam River

Water Rights

Max rate cfs

- 0.0008 - 4.17
- 4.17 - 11.625
- 11.625 - 23.965
- 23.965 - 42.372
- 42.372 - 76.195
- 76.195 - 123.82
- 123.82 - 201.807
- 201.808 - 345.248
- 345.248 - 902.158
- 902.158 - 4600
- no data
- Historically Inaccessible

0 9 18 27
Km

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

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