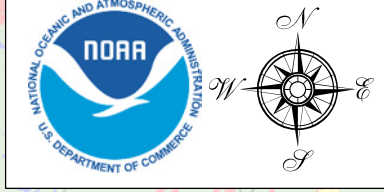
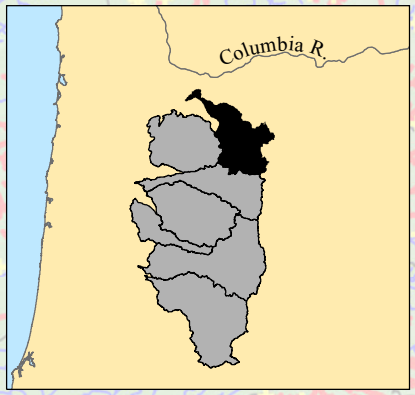
Clackamas River Accessibility

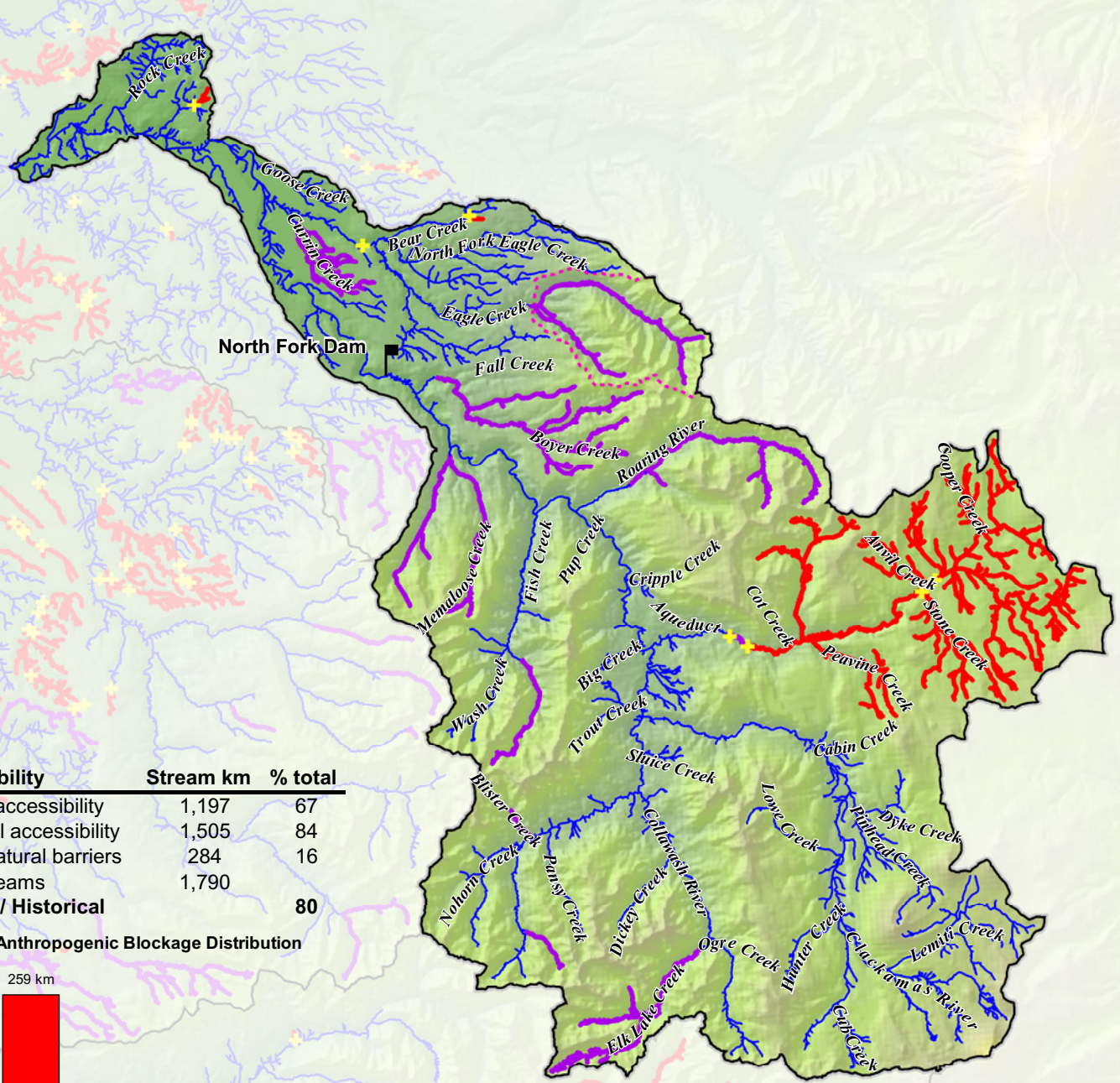
Upper Willamette Spring Chinook Salmon

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

0 5 10 15 20
Km

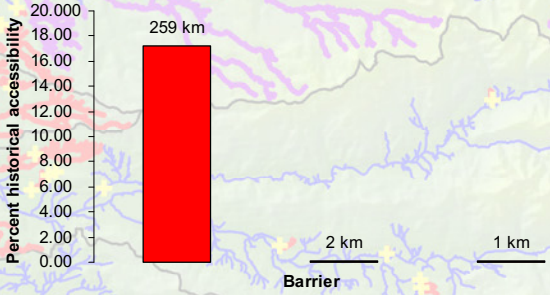






Accessibility	Stream km	% total
Current accessibility	1,197	67
Historical accessibility	1,505	84
Above natural barriers	284	16
Total streams	1,790	
Current / Historical		**80**

Anthropogenic Blockage Distribution



1:430,000

Clackamas River

Clackamas River
2002 303(d) Listed Water Courses

Upper Willamette Spring Chinook Salmon

PARAMETER

E Coli

Temperature

Historically Inaccessible

0 5 10 15 20

Km

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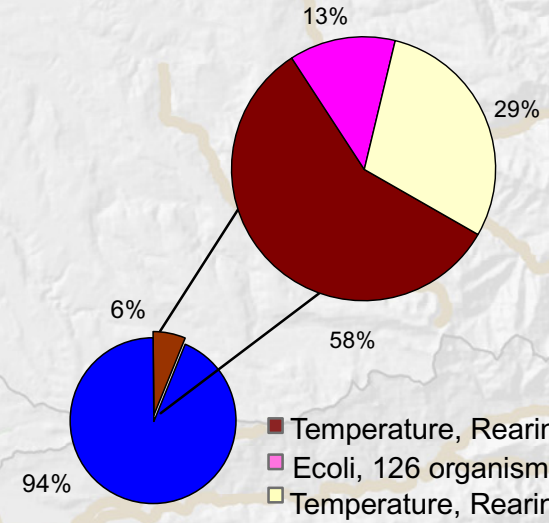
N W E S

Rock Creek
Goose Creek
Currin Creek
Bear Creek
North Fork Eagle Creek
Eagle Creek
North Fork Dam
Fall Creek
Boyer Creek
Roaring River
Cooper Creek
Anvil Creek
Stone Creek
Pup Creek
Fish Creek
Menaloose Creek
Cripple Creek
Aqueduct
Cot Creek
Peavine Creek
Big Creek
Wash Creek
Trout Creek
Cabin Creek
Sluice Creek
Blister Creek
Love Creek
Dyke Creek
Pinhead Creek
Collawash River
Nohorn Creek
Pansy Creek
Dickey Creek
Ogre Creek
Hunter Creek
Clackamas River
Lemiti Creek
Elk Lake Creek
Cub Creek

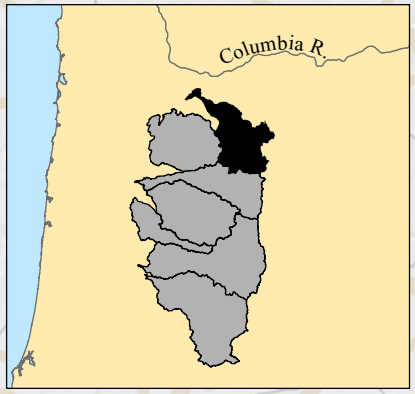
Total 303(d) Streams = 6% Total 100k Streams



Temperature, Rearing: 17.8 C

Ecoli, 126 organisms per 1

Temperature, Rearing: 17.8 C & Ecoli, 126 organisms per 1



Total 303(d) streams - 96.38 km

Remaining 100k streams - 1,430 km

1:430,000

Clackamas River
ODFW Distribution

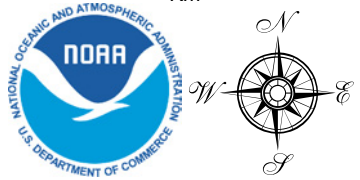
Upper Willamette Spring Chinook Salmon

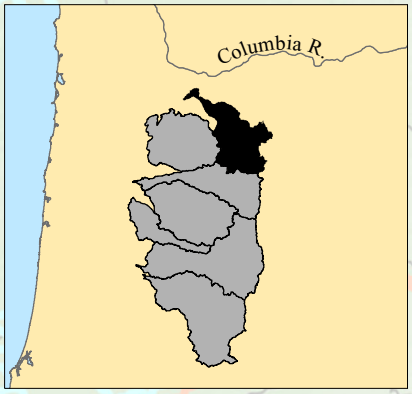
Use type

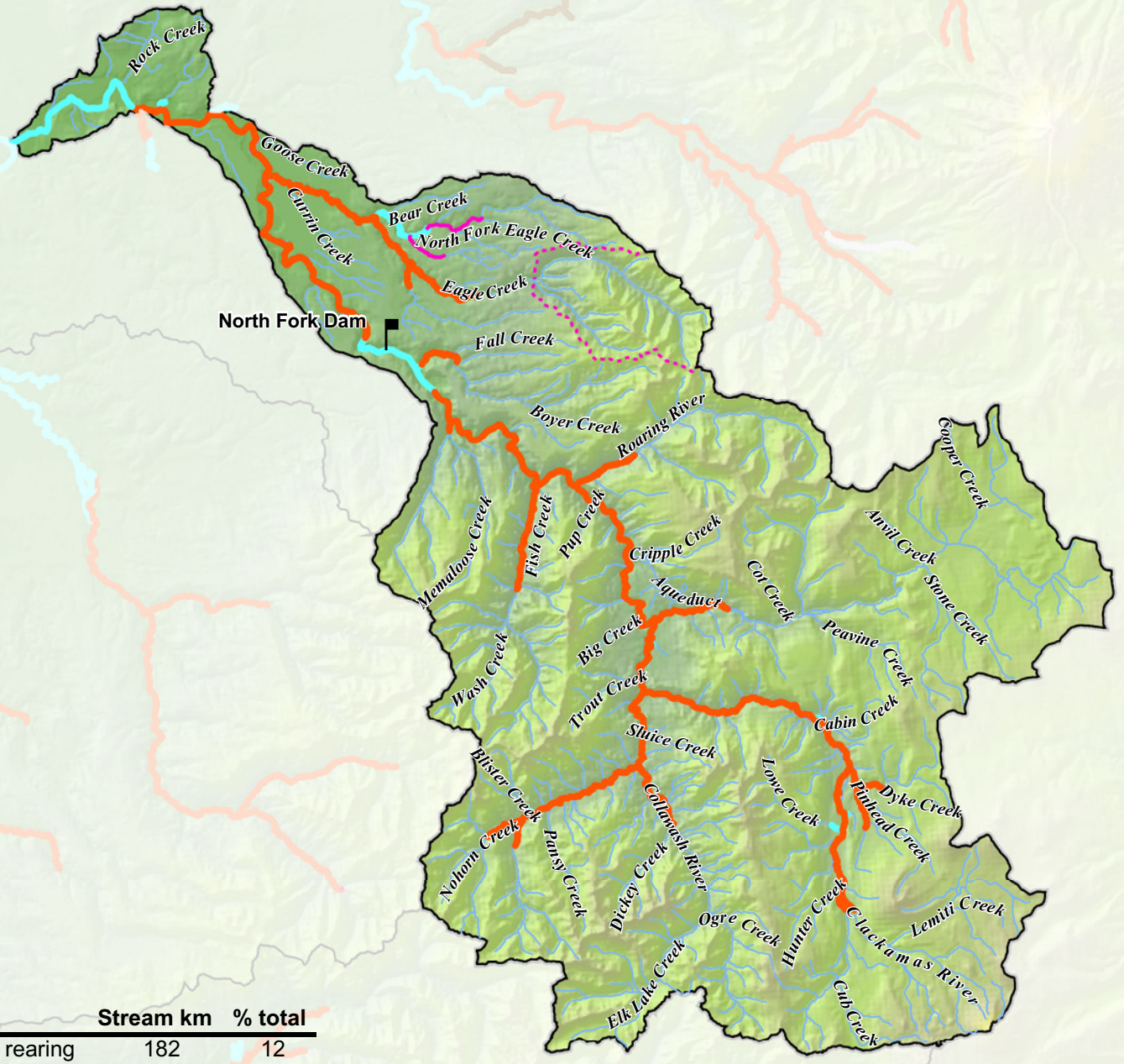
- Spawning and rearing
- Rearing and migration
- Migration
- Previous/Historical
- Present, unknown use
- Absent
- Disputed
- Historically Inaccessible

0 5 10 15 20

Km







Use type	Stream km	% total
Spawning and rearing	182	12
Rearing and migration	30	2
Disputed	8	<1
Total use	219	14
Total 100k streams	**1,555**	**100**

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Clackamas River

Clackamas River
FEMA Q3 Flood Data

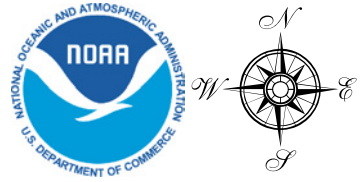
Upper Willamette Spring Chinook Salmon

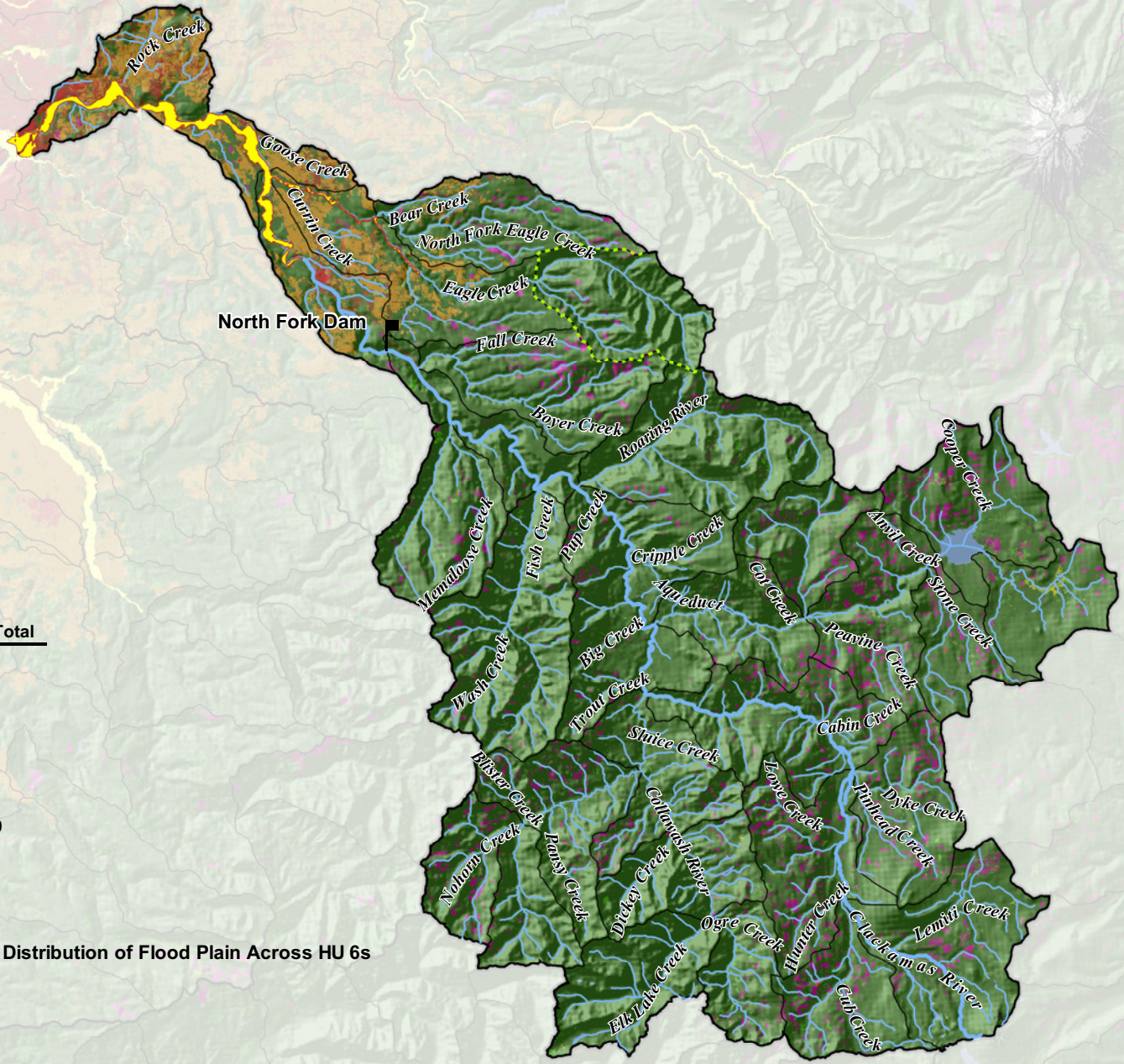
Flood plain

Historically Inaccessible

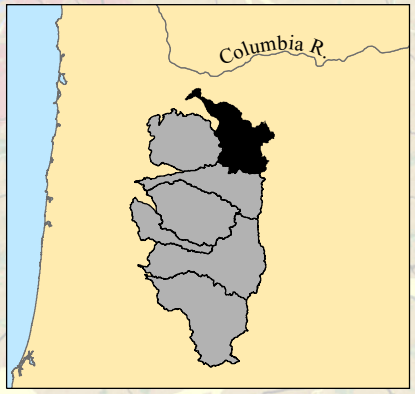
0 5 10 15 20

Km

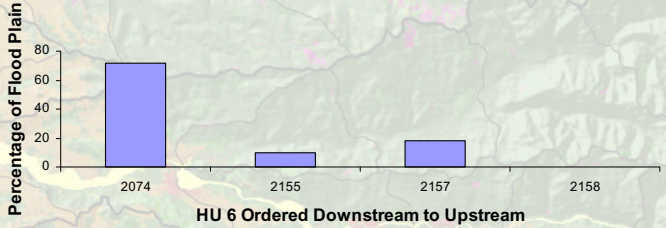




Flood Plain Land Cover	Square Km	Pecent Total
Lakes and streams	2	11
Rock, sand and clay	<1	<1
Sparse vegetation in transition/recovery	<1	1
Grasslands	<1	2
Developed	1	6
Forest and shrubs	10	56
Agriculture	4	23
Wetlands	<1	1
Total 100 yr. Flood Plain	**18**	**100**



Spatial Distribution of Flood Plain Across HU 6s



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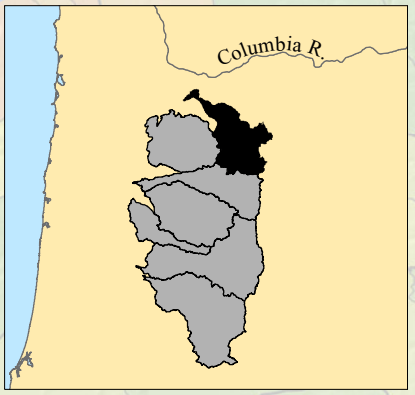
Clackamas River
2000 HU Population Density

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 5 10 15 20
Km



Upper Willamette Spring Chinook Salmon

Rock Creek
Goose Creek
Currin Creek
Bear Creek
North Fork Eagle Creek
Eagle Creek
North Fork Dam
Fall Creek
Boyer Creek
Roaring River
Cooper Creek
Anvil Creek
Stone Creek
Memaloose Creek
Fish Creek
Pup Creek
Cripple Creek
Cot Creek
Aqueduct
Pewine Creek
Big Creek
Wash Creek
Trout Creek
Cabin Creek
Sluice Creek
Bister Creek
Love Creek
Pinhead Creek
Dyke Creek
Collawash River
Nohorn Creek
Pansy Creek
Dickey Creek
Ogre Creek
Hunter Creek
Clackamas River
Lemiti Creek
Elk Lake Creek
Cltd Creek

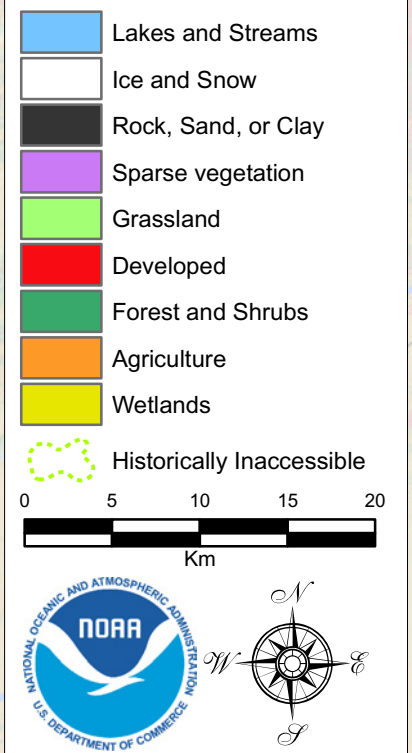
Year	Total Human Population / Square Km	Total Human Population	% Increase
2000	17	36,201	
2040	31	66,424	83

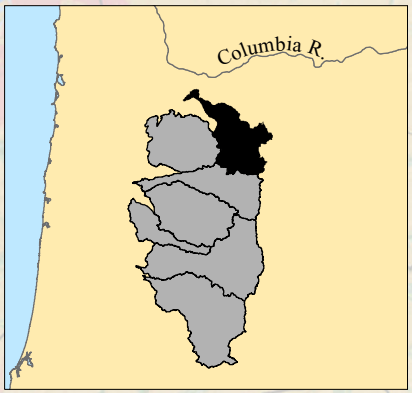
1:430,000

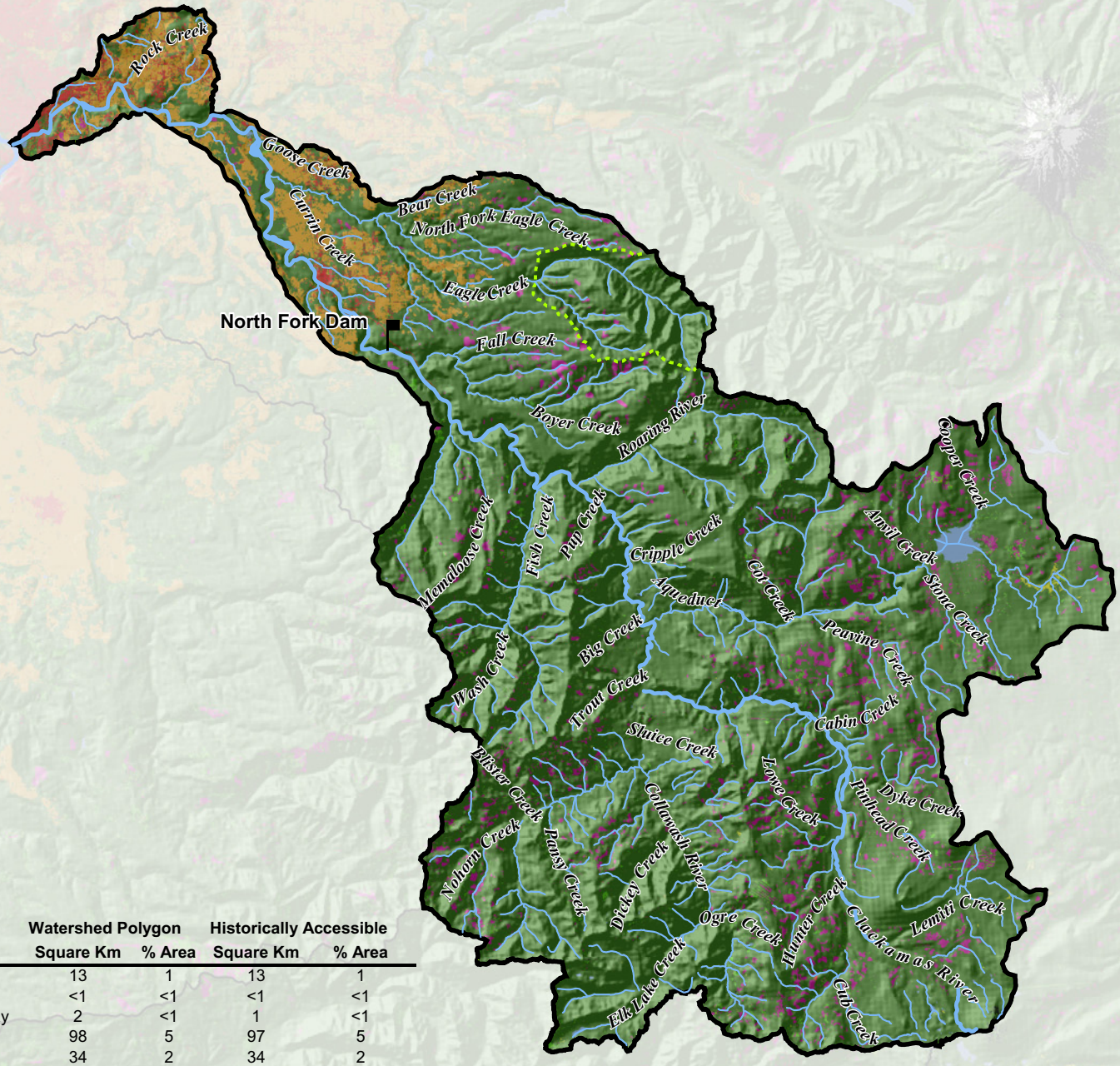
Clackamas River

Clackamas River
Land Cover

Upper Willamette Spring Chinook Salmon







Land Cover	Watershed Polygon Square Km	% Area	Historically Accessible Square Km	% Area
Lakes and streams	13	1	13	1
Ice and snow	<1	<1	<1	<1
Rock, sand and clay	2	<1	1	<1
Sparse vegetation	98	5	97	5
Grasslands	34	2	34	2
Developed	22	1	22	1
Forest and shrubs	1,862	88	1,793	87
Agriculture	88	4	88	4
Wetlands	3	<1	3	<1
Total	**2,122**	**100**	**2,051**	**100**

1:430,000

Clackamas River

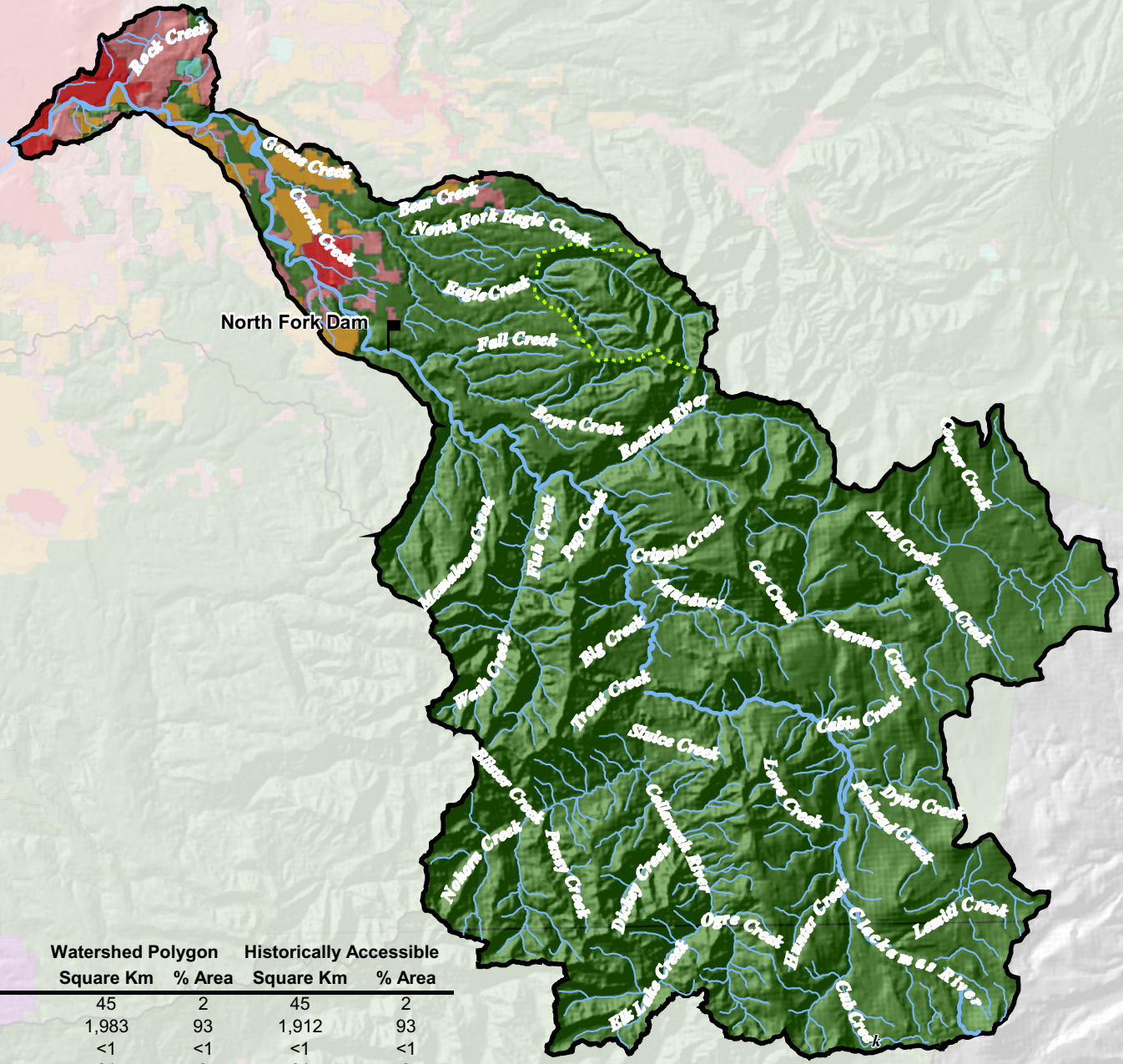
Land Use

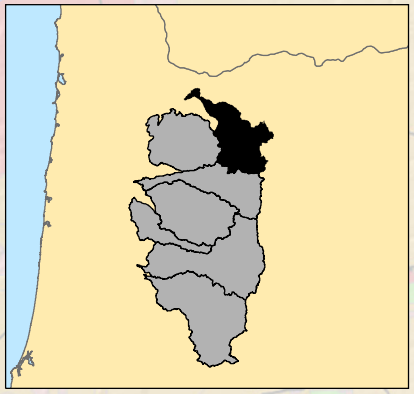
- Agriculture - forest zone
- Agriculture
- Forest
- Mineral resource zone
- Conservation zone
- Park and recreation
- Public facility
- Rural commercial
- Rural industrial
- Rural residential
- Urban
- Water
- Historically Inaccessible

0 5 10 15 20

Km

Upper Willamette Spring Chinook Salmon





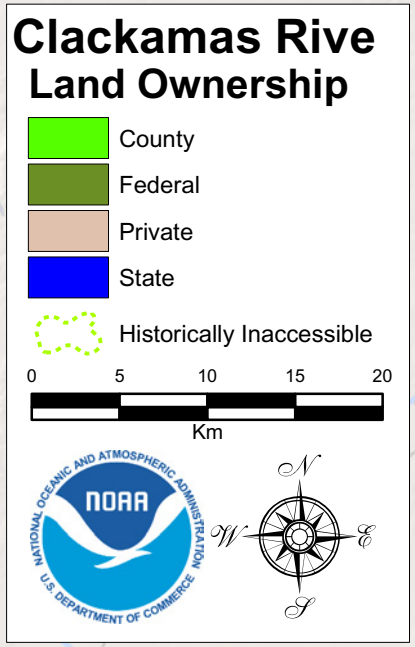
Land Use	Watershed Polygon Square Km	% Area	Historically Accessible Square Km	% Area
Agriculture	45	2	45	2
Forest	1,983	93	1,912	93
Rural industrial	<1	<1	<1	<1
Rural residential	61	3	61	3
Rural service center	2	<1	2	<1
Indian reservation	1	<1	1	<1
Urban	30	1	30	1
Total	**2,121**	**100**	**2,051**	**100**

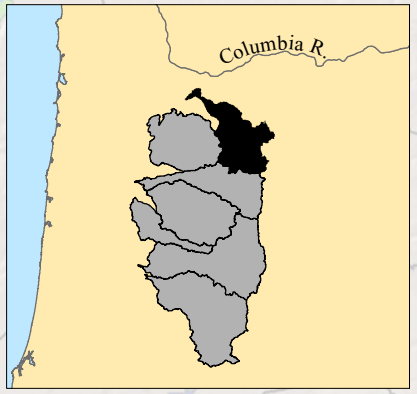
1:430,000

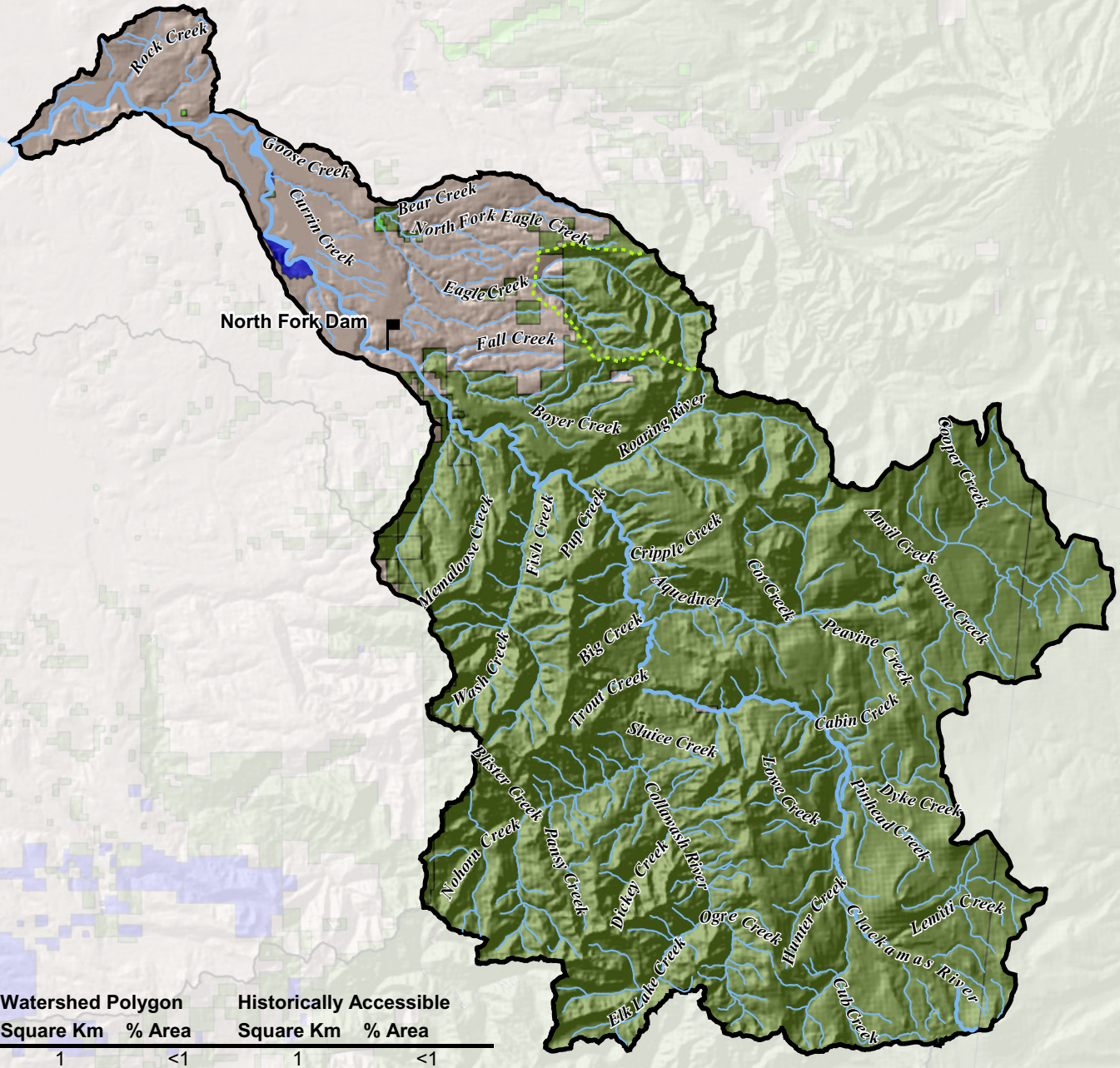
Clackamas River

Clackamas Rive
Land Ownership

Upper Willamette Spring Chinook Salmon





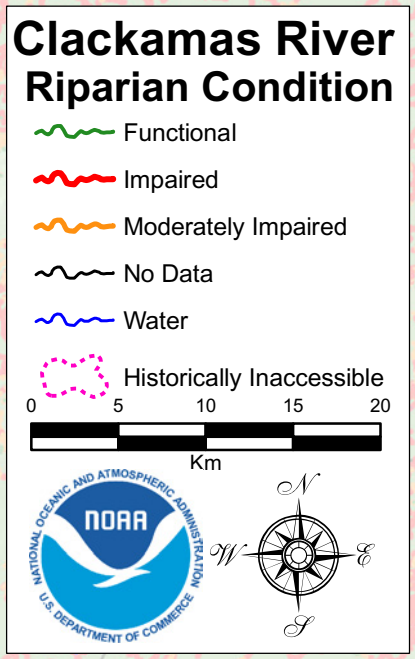


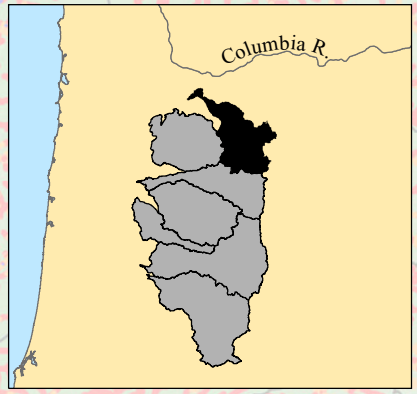
Ownership	Watershed Polygon Square Km	% Area	Historically Accessible Square Km	% Area
County	1	<1	1	<1
Federal	1,775	84	1,710	83
Private	341	16	336	16
State	4	<1	4	<1
Total	**2,122**	**100**	**2,051**	**100**

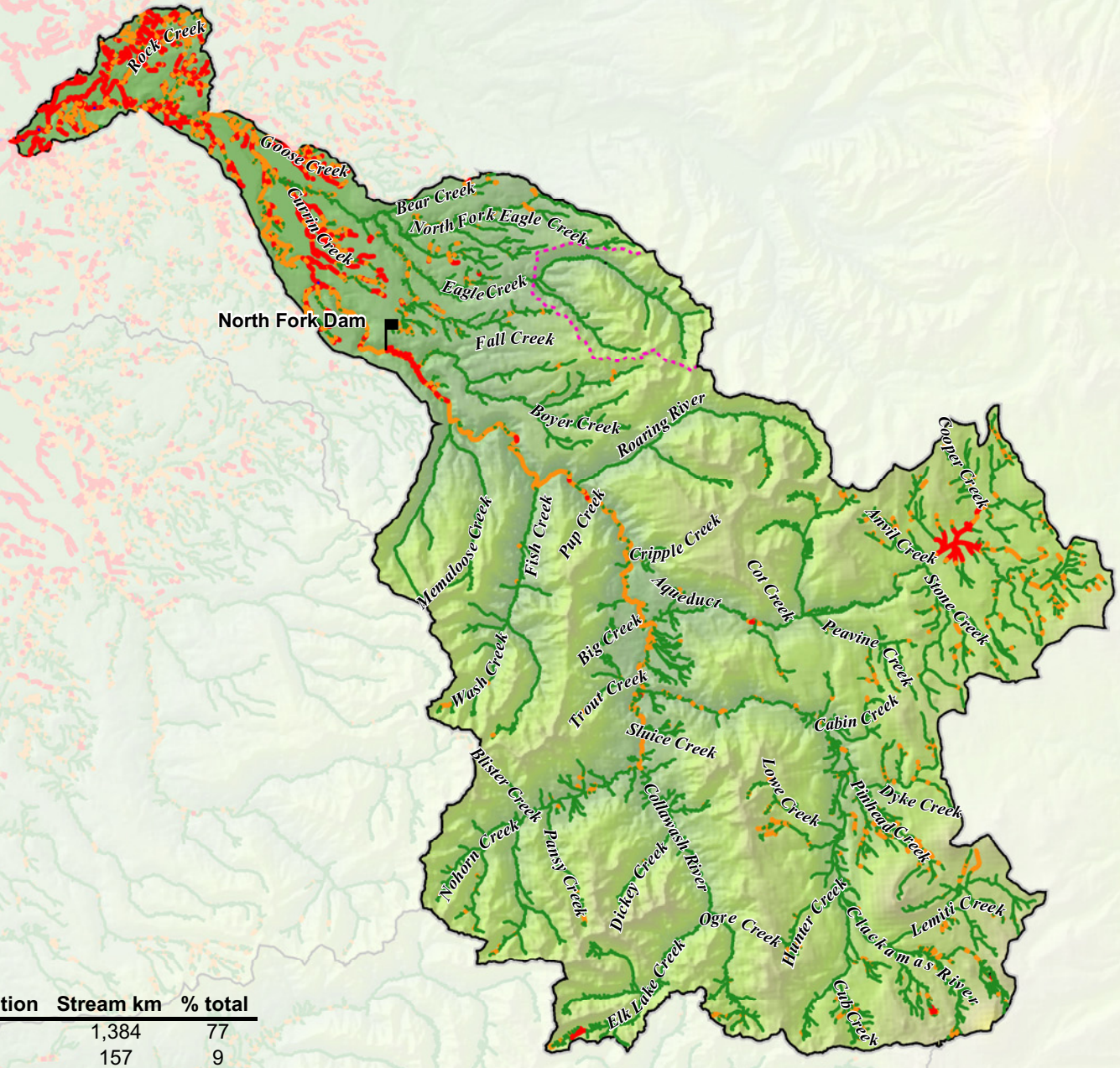
1:430,000

Clackamas River
Riparian Condition

Upper Willamette Spring Chinook Salmon







Riparian condition	Stream km	% total
Functional	1,384	77
Impaired	157	9
Moderately impaired	237	13
No data	10	1
Water	1	<1
Total	**1,790**	**100**

1:430,000

Clackamas River

Clackamas 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 - 505.973
- 505.974 - 902.158
- 902.158 - 1900
- 1900 - 4600
- no data
- Historically Inaccessible

0 5 10 15 20
Km

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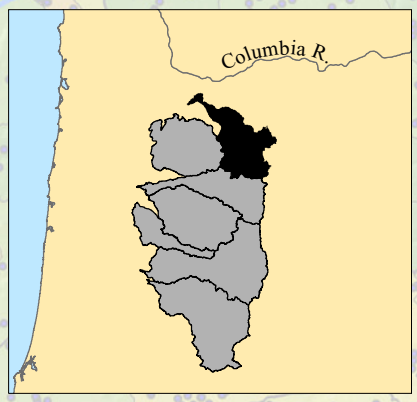
N W E S



Upper Willamette Spring Chinook Salmon

Max rate cfs
- 0 - 2
- 2 - 8
- 8 - 34
- 34 - 62
- 62 - 150

North Fork Dam

Rock Creek
Goose Creek
Current Creek
Bear Creek
North Fork Eagle Creek
Eagle Creek
Fall Creek
Boyer Creek
Roaring River
Cooper Creek
Memaloose Creek
Fish Creek
Pup Creek
Cripple Creek
Aqueduct
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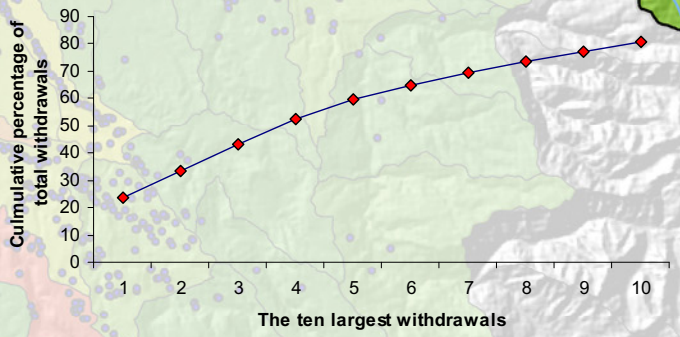

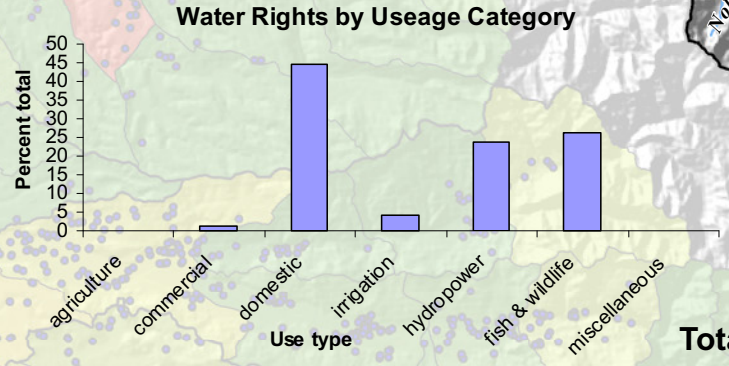

Total max rate for population equals 636 cfs.

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