Oregon Water Resources Department
Scenic Waterway Flow Framework

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Overview

- **Water Availability Program**
  - **Role in Scenic Waterway process**
- **Allocation process**
  - **How Scenic Waterway affects future of allocated water**
- **Scenic Waterway flow determination**
  - **Recommendation**

Water Resources Department (WRD)
Scenic Waterways

Addresses Integrated Water Resources Strategy Recommended Action #11.B:

“Develop Additional Instream Protections”

Water Resources Department (WRD) Vision and Mission

- **Ensure sufficient and sustainable water supplies to meet *current* and *future* needs**
- **Restore and protect streamflows and watersheds**
- **Need to quantify water resources statewide**

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Water Availability Program

- **Statewide data-driven / statistical approach**
- **Surface water accounting equation:**

  Natural streamflow – Expected demands = Water Available to Allocate

- **Expected demands**
  - **Storage**
  - **Consumptive uses**
  - **Instream demands**
    - **Scenic waterways accounted for as instream demands**

Understanding Impacts of Scenic Waterways on Water Rights

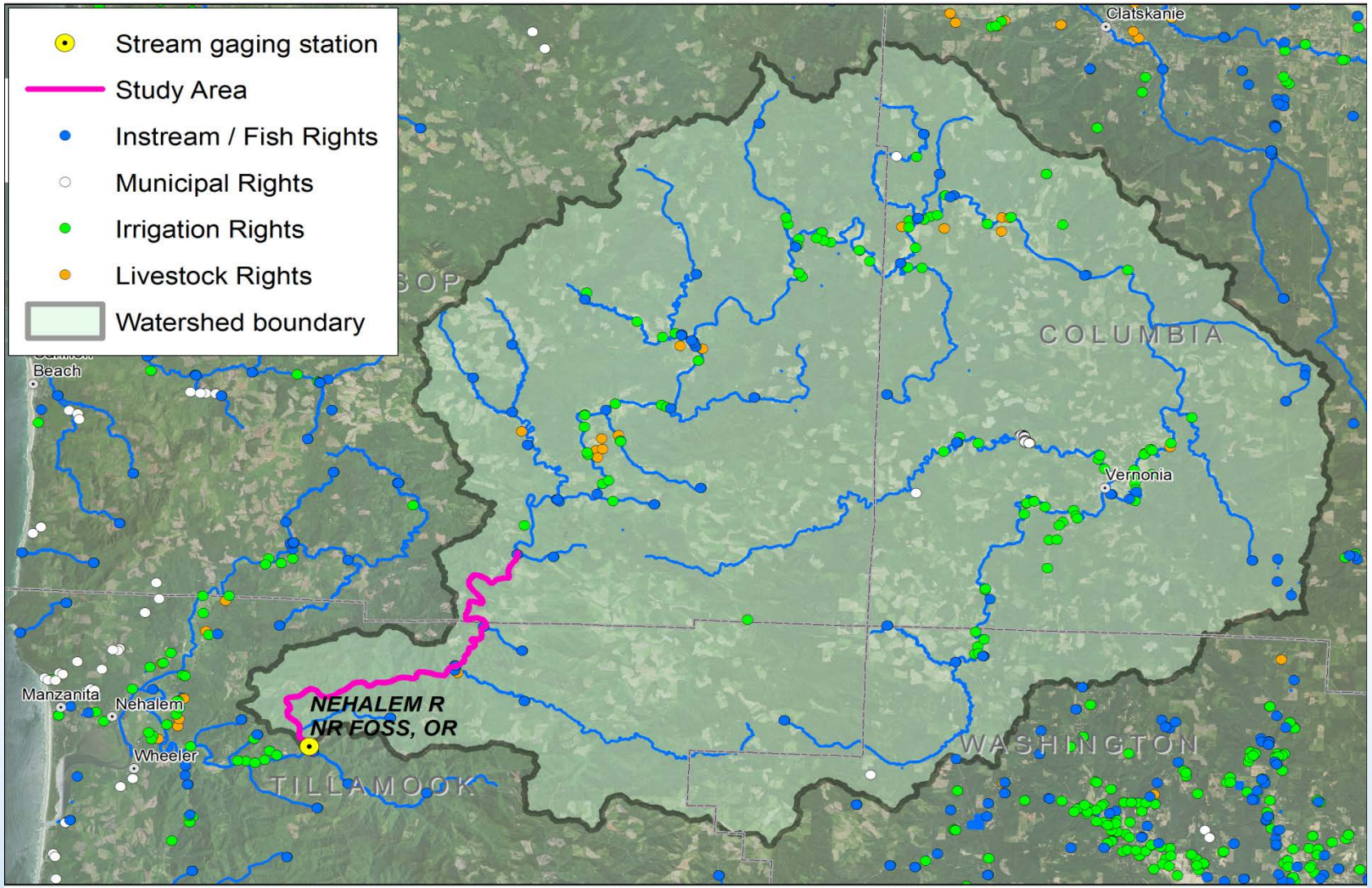
Scenic waterways DO/ARE:

- Protect water instream through WRD's allocation system
- Limit ***future*** diversions ***within*** and ***upstream*** of the scenic waterway
  - Including groundwater

Scenic waterways DO/ARE NOT:

- Affect ***existing*** uses anywhere in the watershed
- Affect ***future*** uses ***downstream*** of the waterway
- Water rights, nor are enforced as water rights

Nehalem River Study Area and Water Rights



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OWRD Surface Water (jpb), 5/21/2018, Projection: Oregon Lambert NAD83
This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

0 2.5 5 10 Miles

N

Methodology for Quantifying Flows

- **Goal: protect and enhance values, and limit new allocations and development within scenic waterway**
  - Not intended to restore to pristine condition
  - Program applies to all **NEW** developments only
- **Methodology considers:**
  - OWRD's Water Availability Reporting System
  - Recreation, fish, and wildlife needs
- **Basic premise:** vary flow protection throughout year to protect highest and best use of water

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Recommending Flow Protection

- **Fully protecting summertime flows**
  - Protects flows needed for recreation and critical period for fish survival
- **Increased protection for shoulder months (September-October/April-May)**
  - Maintains flows important for ecosystem function
- **Protect 85% of flows during winter months (December – March)**
  - Fish habitat can withstand 15% reduction in flow (Locke and Paul, 2011)

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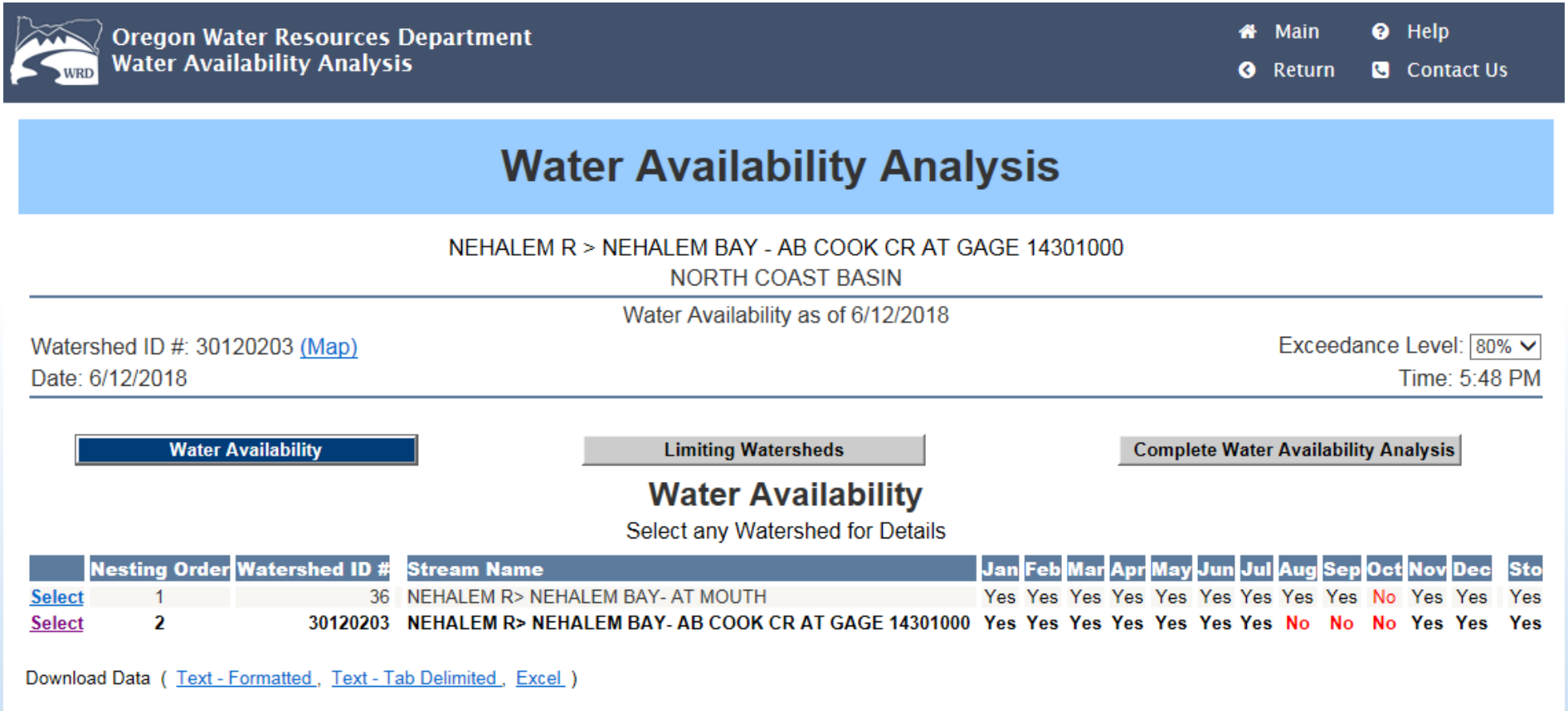
Water Availability



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Water Availability Analysis

Main Help
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Water Availability Analysis

NEHALEM R > NEHALEM BAY - AB COOK CR AT GAGE 14301000
NORTH COAST BASIN

Water Availability as of 6/12/2018

Watershed ID #: 30120203 (Map)
Date: 6/12/2018

Exceedance Level: 80%
Time: 5:48 PM

Water Availability | Limiting Watersheds | Complete Water Availability Analysis

Water Availability

Select any Watershed for Details

	Nesting Order	Watershed ID #	Stream Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
Select	1	36	NEHALEM R> NEHALEM BAY- AT MOUTH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Select	**2**	**30120203**	**NEHALEM R> NEHALEM BAY- AB COOK CR AT GAGE 14301000**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**	**Yes**	**Yes**	**Yes**

Download Data (Text - Formatted , Text - Tab Delimited , Excel)

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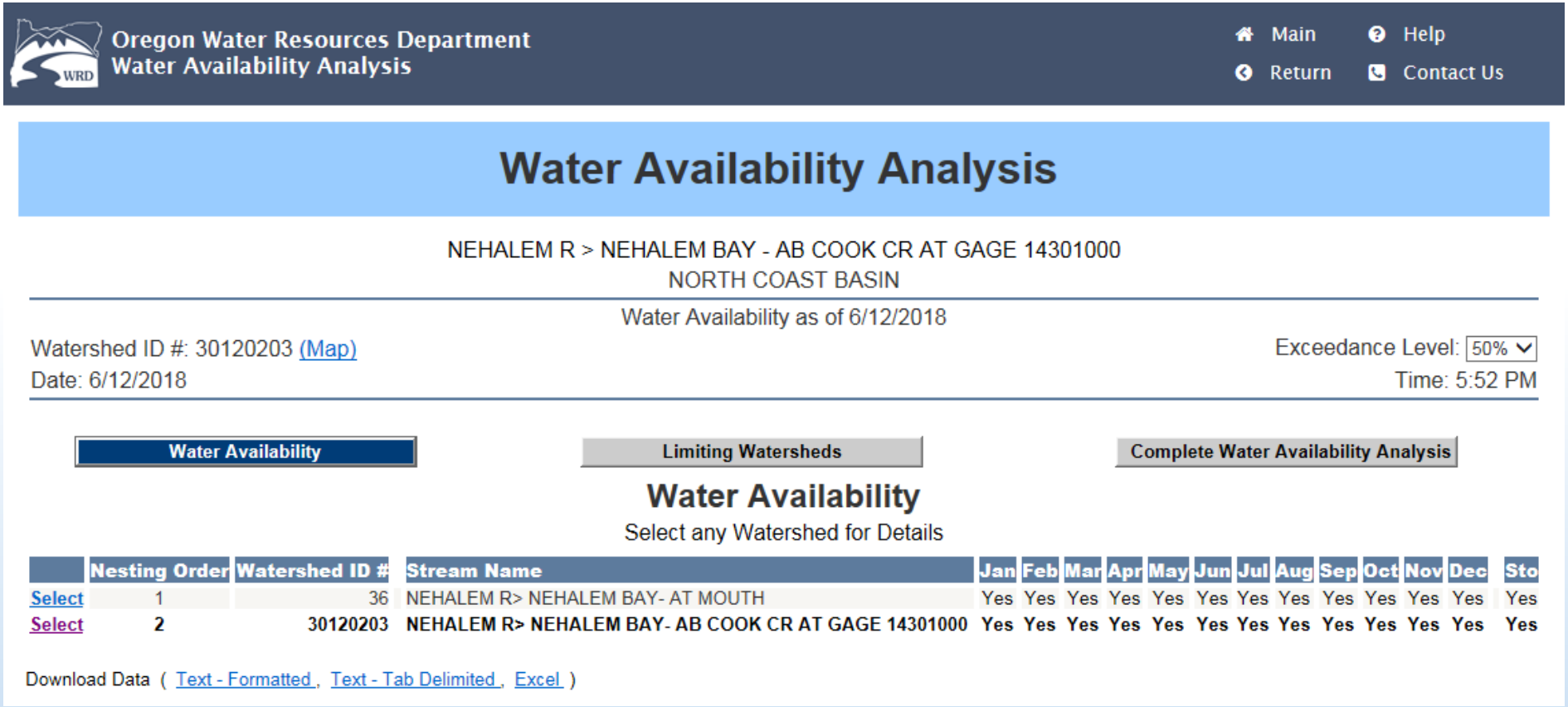
Water Availability



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Water Availability Analysis

NEHALEM R > NEHALEM BAY - AB COOK CR AT GAGE 14301000
NORTH COAST BASIN

Water Availability as of 6/12/2018

Watershed ID #: 30120203 (Map)
Date: 6/12/2018

Exceedance Level: 50%
Time: 5:52 PM

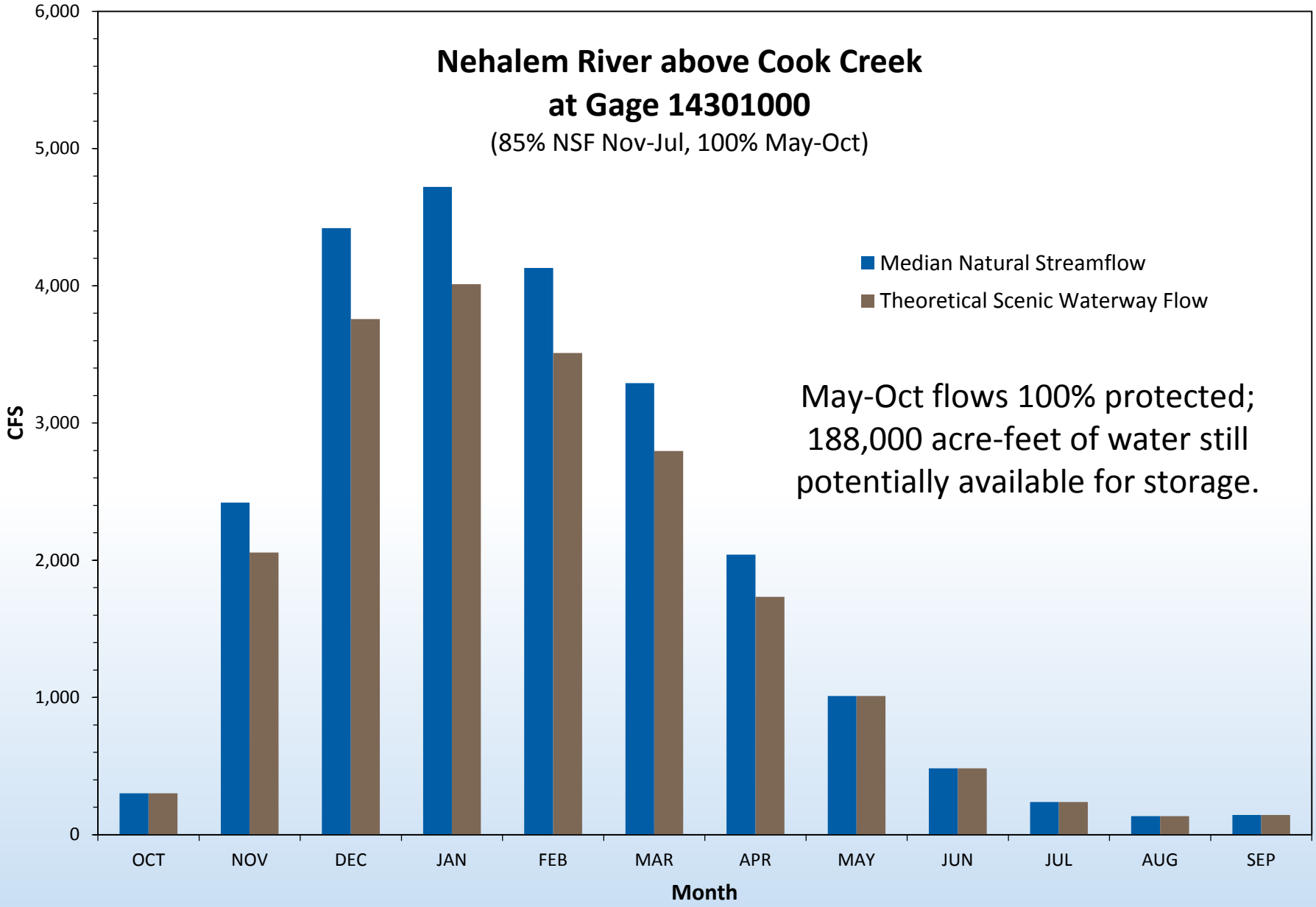
Water Availability | Limiting Watersheds | Complete Water Availability Analysis

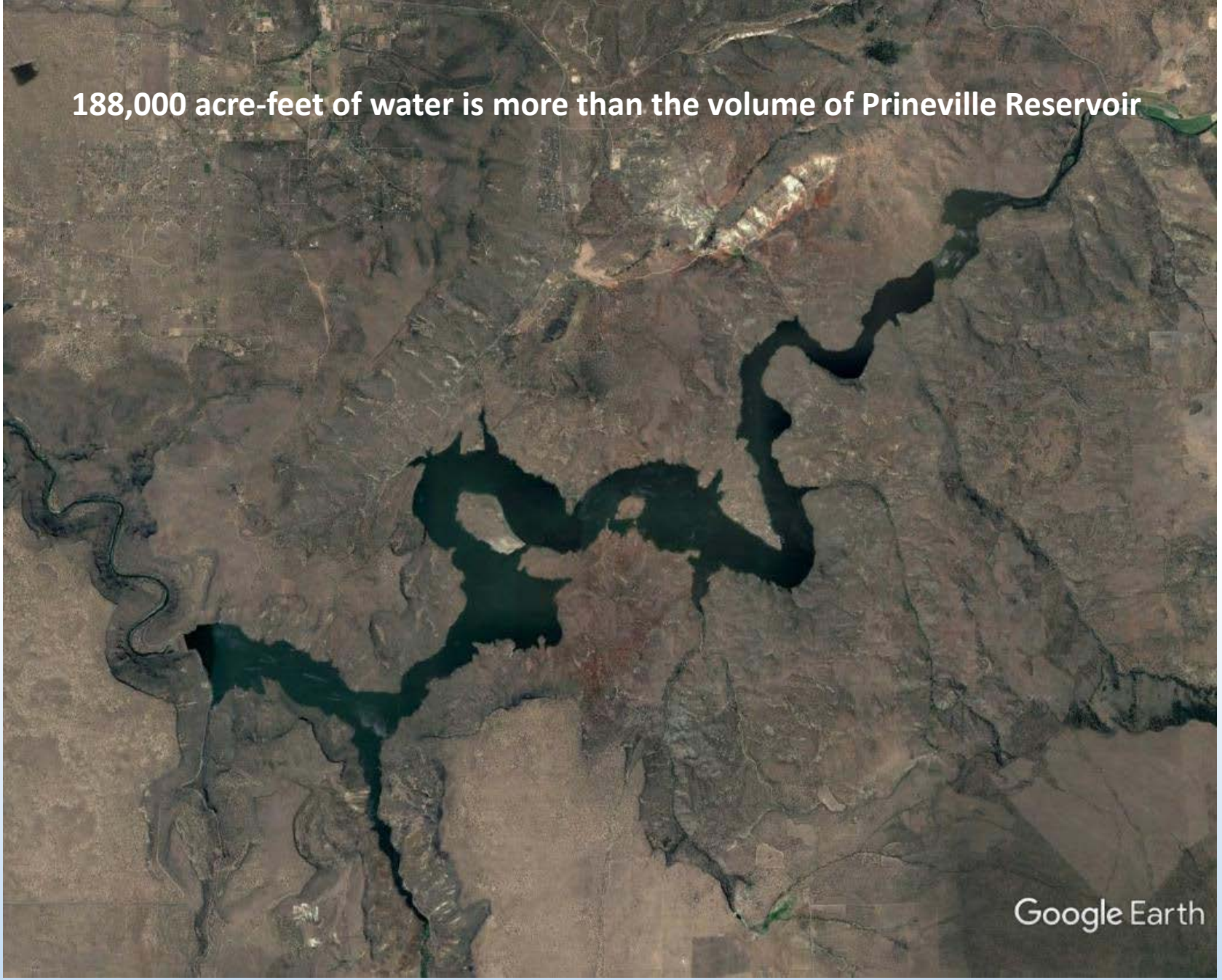
Water Availability

Select any Watershed for Details

	Nesting Order	Watershed ID #	Stream Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
Select	1	36	NEHALEM R> NEHALEM BAY- AT MOUTH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Select	**2**	**30120203**	**NEHALEM R> NEHALEM BAY- AB COOK CR AT GAGE 14301000**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

Download Data (Text - Formatted , Text - Tab Delimited , Excel)


Nehalem River above Cook Creek
at Gage 14301000
(85% NSF Nov-Jul, 100% May-Oct)
Median Natural Streamflow
Theoretical Scenic Waterway Flow
May-Oct flows 100% protected;
188,000 acre-feet of water still
potentially available for storage.
CFS
6,000
5,000
4,000
3,000
2,000
1,000
0
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
Month


188,000 acre-feet of water is more than the volume of Prineville Reservoir
Google Earth

Public Input for Flow Recommendation

- Provide suggestions for:
  - Management classification
  - Flow protection

- Community members can weigh flow protection with plans for future water allocation

Photo credit: OPRD

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Questions?