

# **Lower Snake River Dams Transportation Study**

**WPPA - Study Update**

December 2024



Seattle

WASHINGTON

Spokane

Lower Monumental Dam  
Little Goose Dam  
Lower Granite Dam

Snake R

Pasco

Ice Harbor Dam

Clarkston

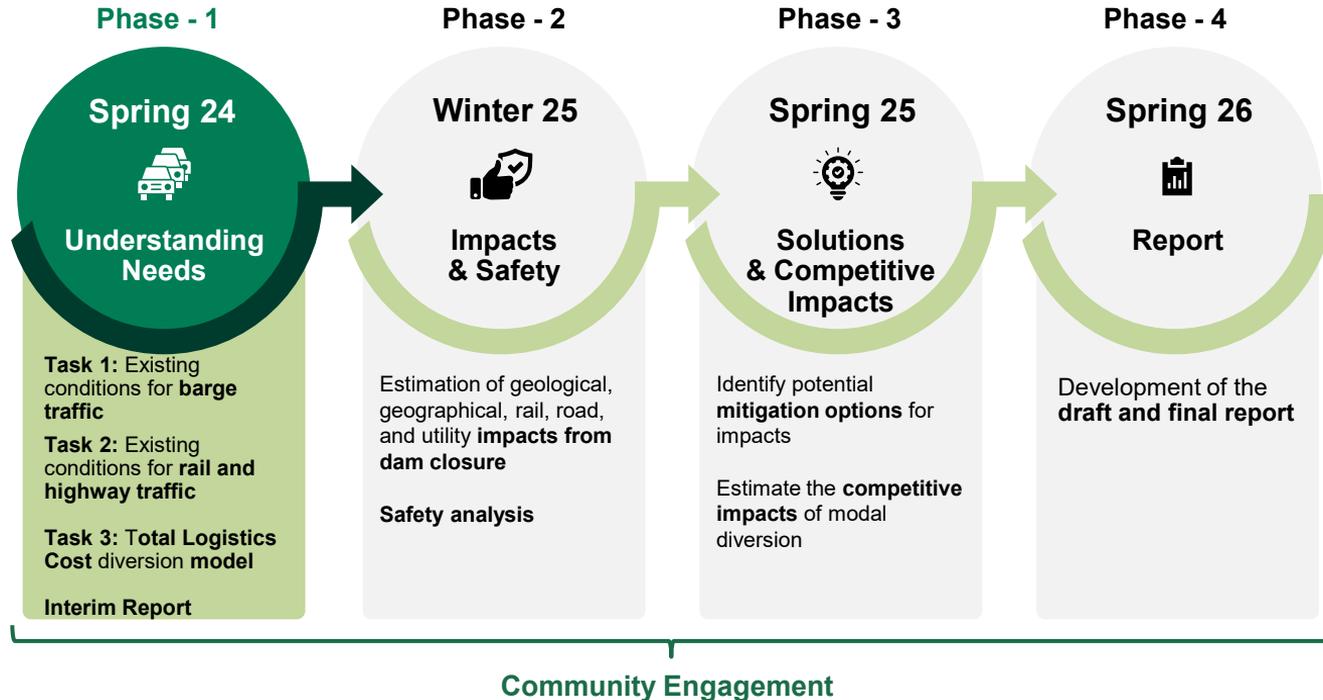
Columbia River

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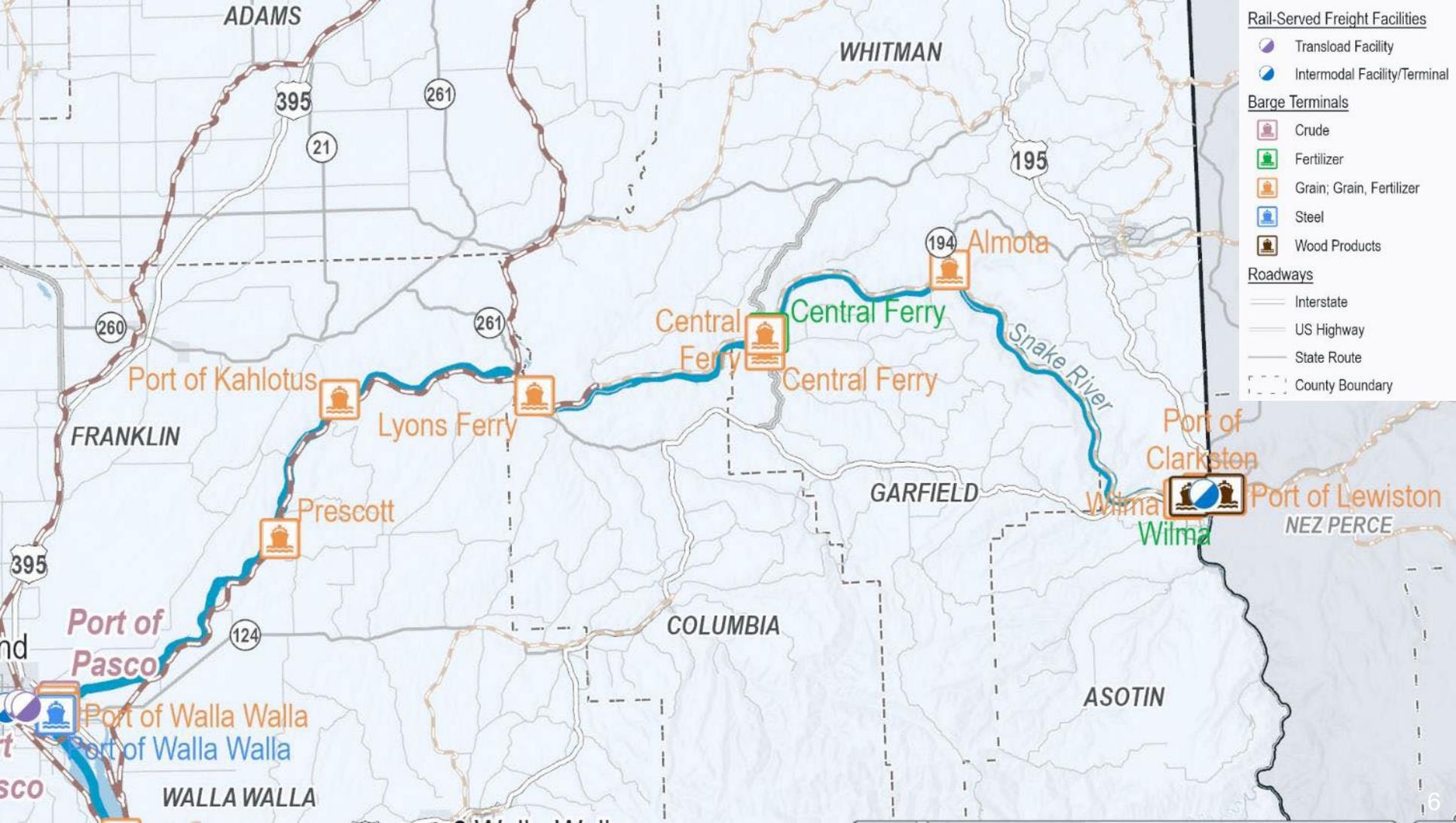
# LSRD Transportation Study

- 2023 Legislative Session Budget Proviso
  - Transportation Impacts of Lower Snake River Dam Removal
  - Joint Transportation Committee Oversight
  - Robust Community Engagement
  - \$5M
    - \$4M for Jacobs Engineering
  - Final Report Due December 31, 2026

# Technical Phases and Tasks



# Barges



**Rail-Served Freight Facilities**

-  Transload Facility
-  Intermodal Facility/Terminal

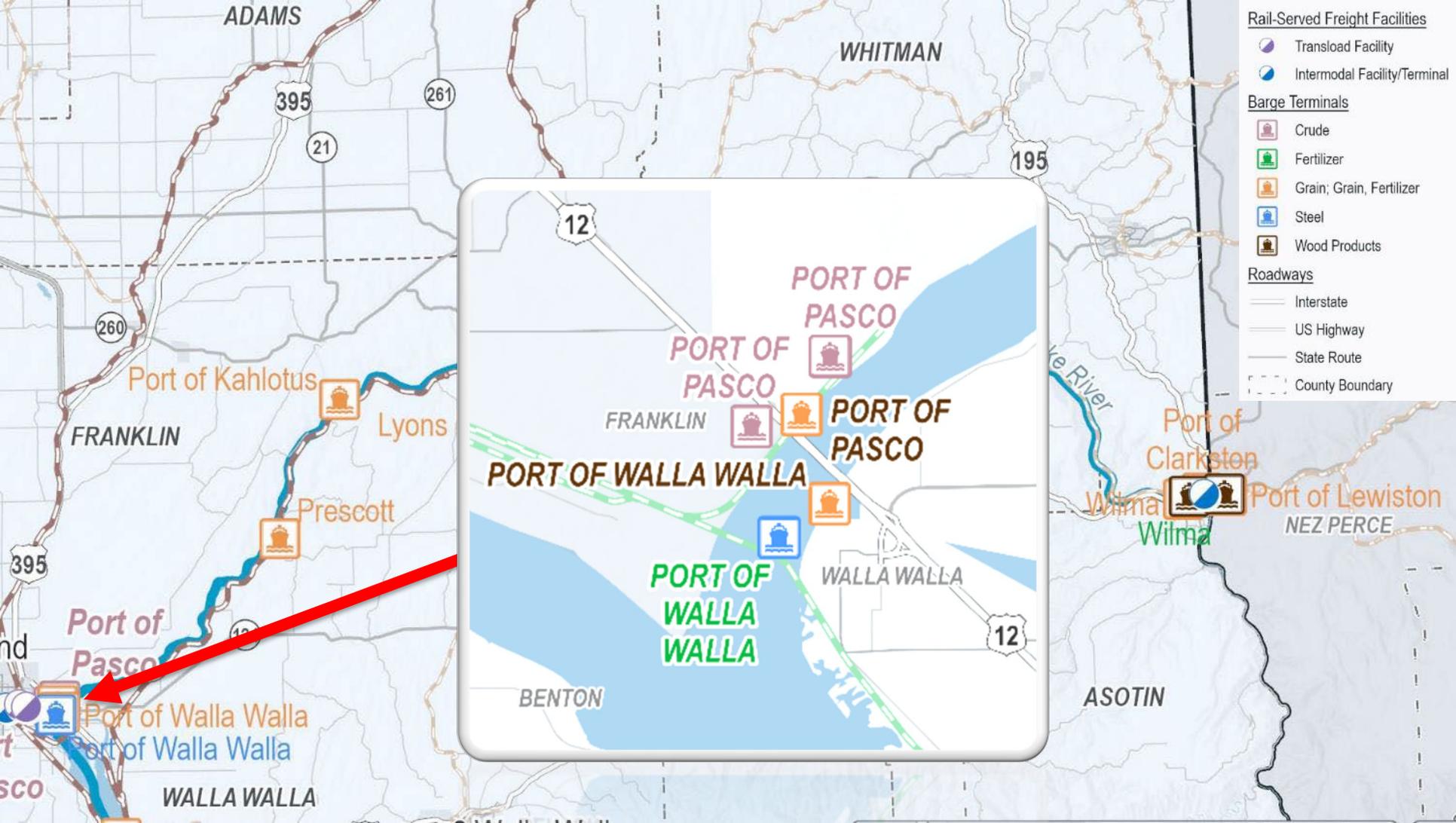
**Barge Terminals**

-  Crude
-  Fertilizer
-  Grain; Grain, Fertilizer
-  Steel
-  Wood Products

**Roadways**

-  Interstate
-  US Highway
-  State Route
-  County Boundary





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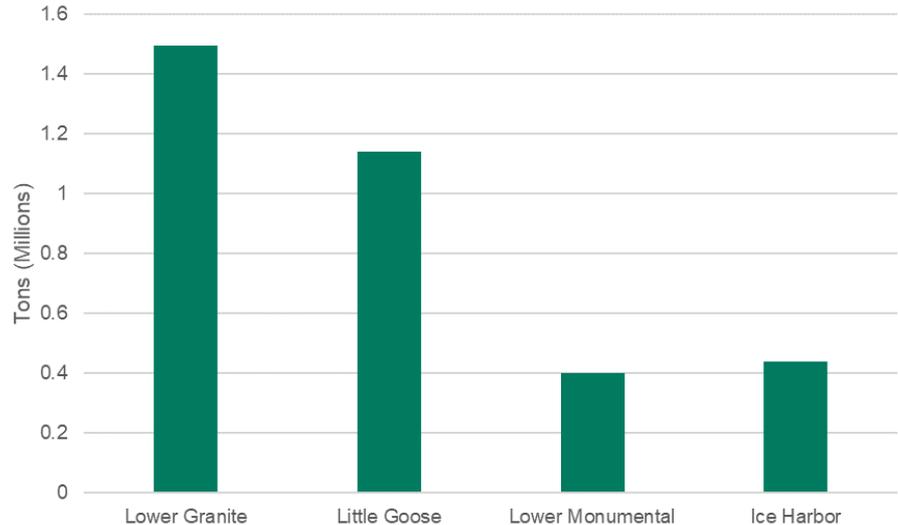
**Roadways**

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- State Route
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## Task 1: Barge Existing Conditions

### River Pool Tonnage

- Lower Granite pool:
  - Wilma
  - Lewiston
  - Clarkston
- Little Goose pool:
  - Alмота
  - Central Ferry
  - Pomeroy

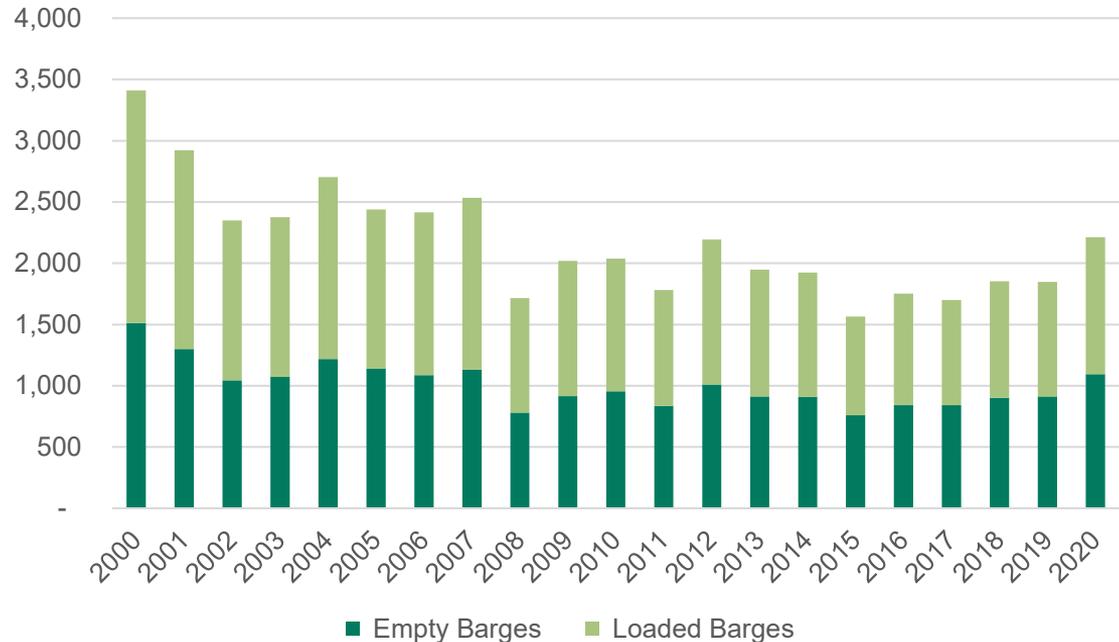


Additional Tonnage Loaded by Downstream River Pool

## Task 1: Barge Existing Conditions

### Ice Harbor Dam Number of Barges

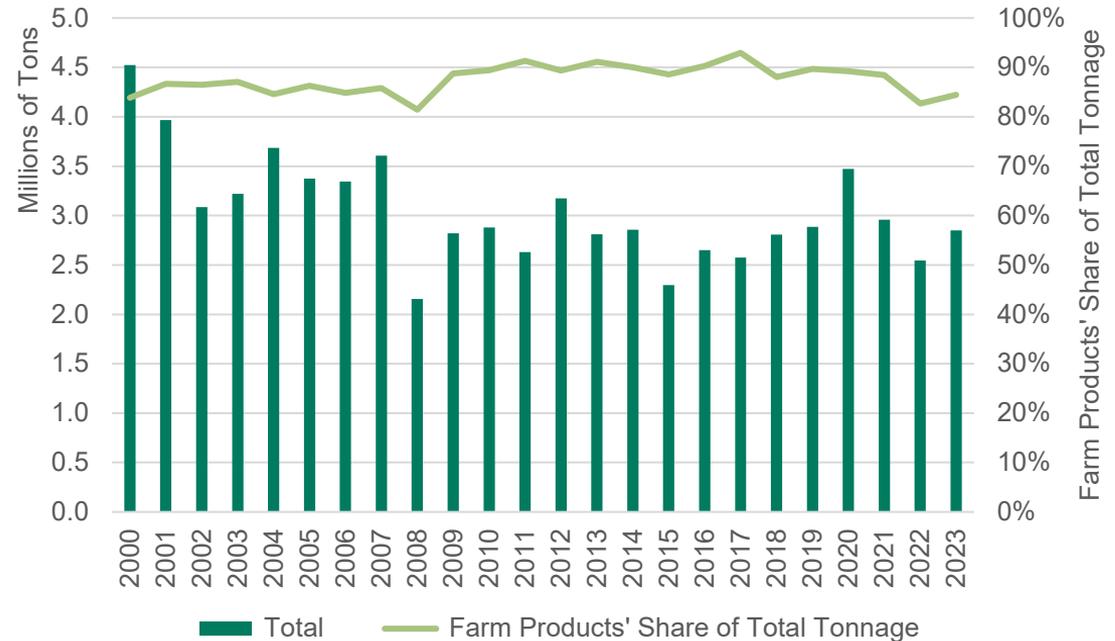
- About 2,000 barges a year go through the Ice Harbor Dam



## Task 1: Barge Existing Conditions

### Ice Harbor Dam Annual Tonnage

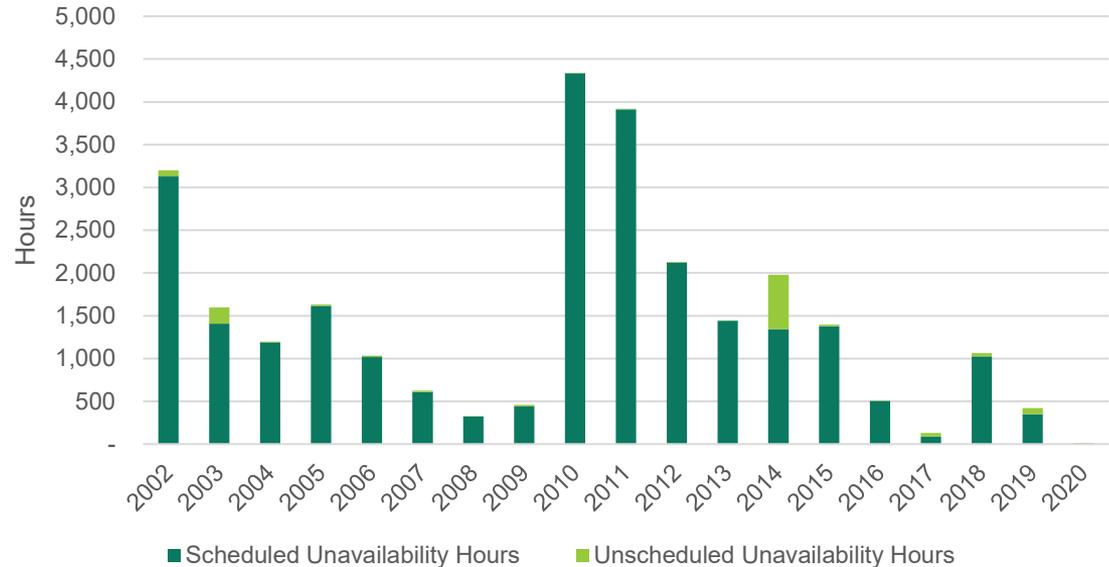
- Roughly 2 to 3 million tons moved annually through the Ice Harbor Dam, mostly grain

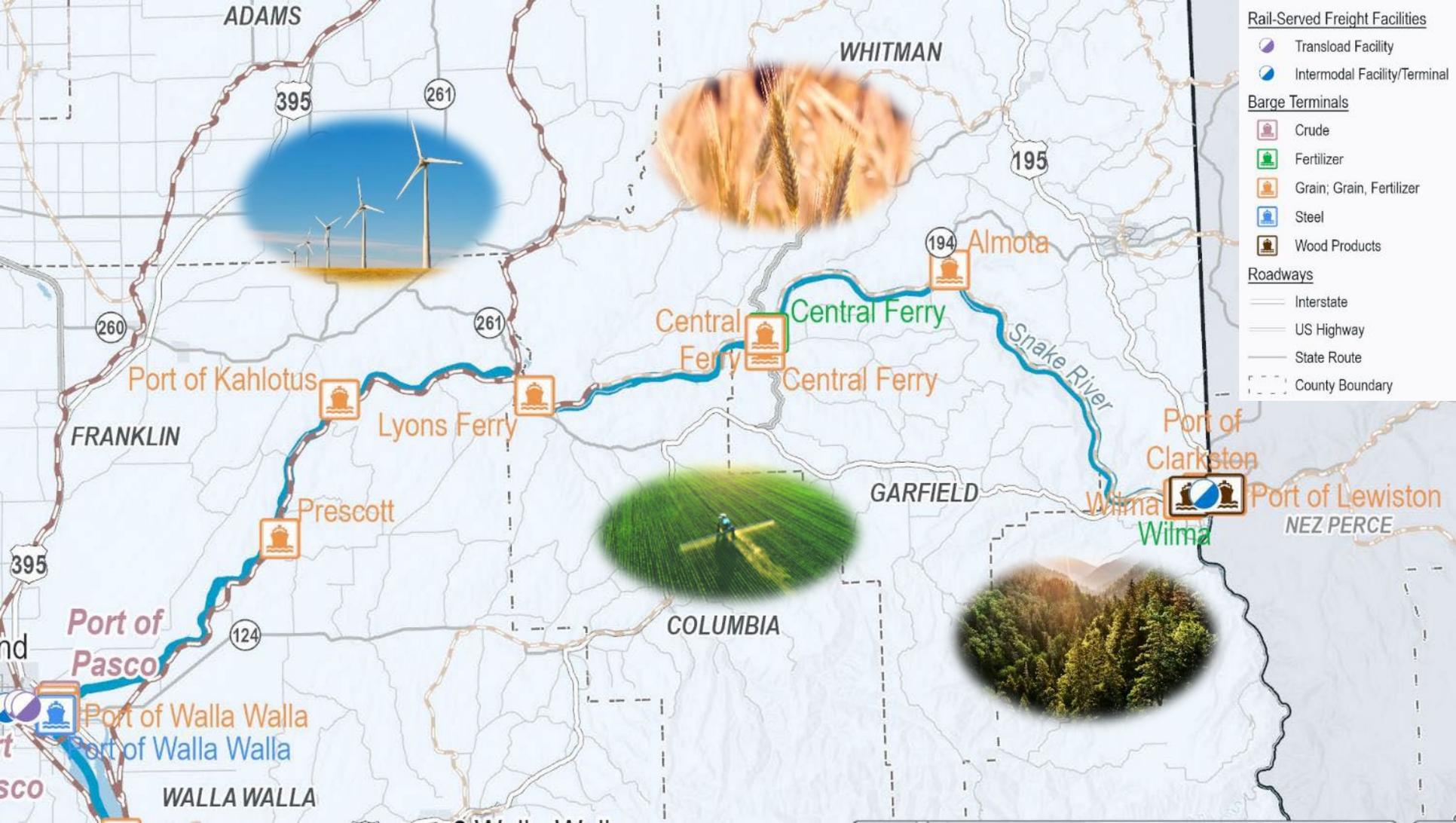


## Task 1: Barge Existing Conditions

### Snake River Lock Closures – hours

- Closure periods are highly variable over the years
- Closures are usually scheduled





**Rail-Served Freight Facilities**

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**Barge Terminals**

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**Roadways**

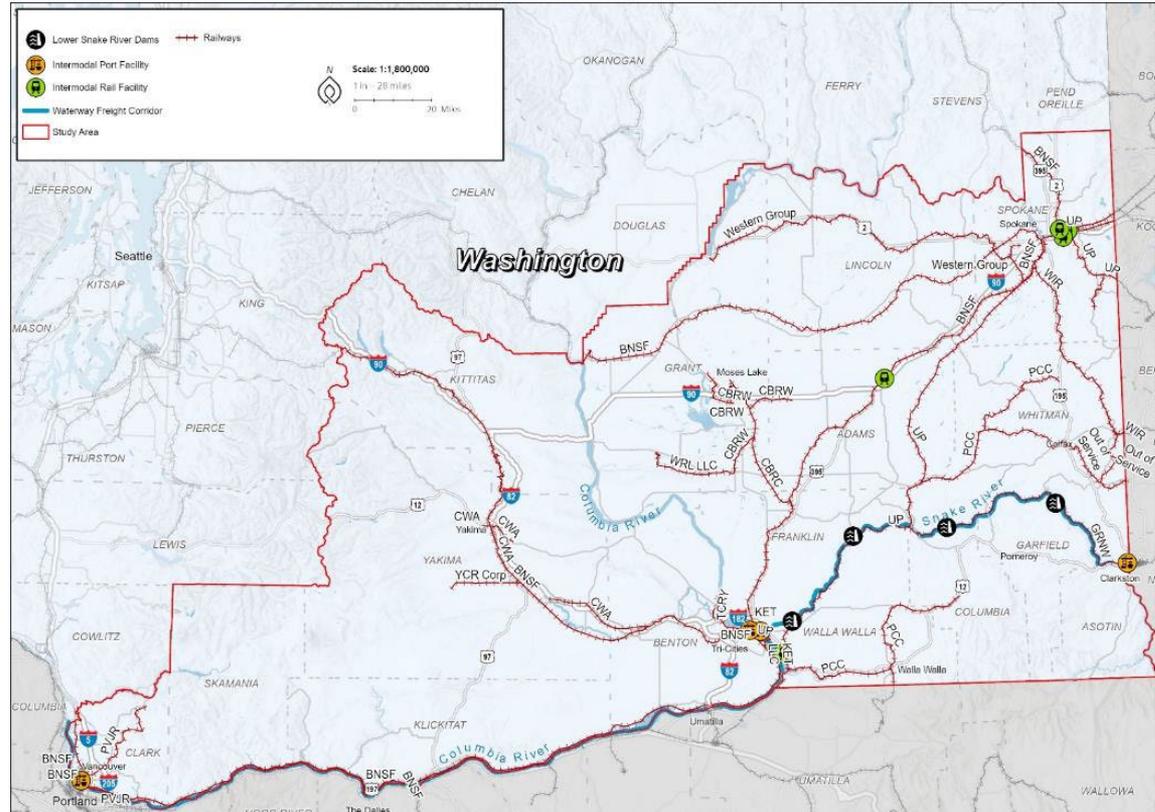
-  Interstate
-  US Highway
-  State Route
-  County Boundary

# Rail

## Task 2: Rail Existing Conditions

### Rail Operators

- Two – Class 1
  - UP
  - BNSF
- Eight – Class 3



## Task 2: Rail Existing Conditions

### Rail Volumes Compared to Capacities

- No major capacity issues, but during peak season capacity may be constrained
- Future growth and modal diversion from dam closure will also impact capacity
- Initial outreach indicates there are related capacity issues at intermodal terminals

Name	Daily Trains	Practical Capacity Max. Daily Trains	Volume-Capacity Ratio
Pasco-Cheney (BNSF)	38	62	0.61
Cheney-Spokane (BNSF & UP)	38	50	0.76
Vancouver-Pasco (BNSF)	32	41	0.78
Hermiston-Cheney (UP)	10	23	0.43
Hermiston-Portland (UP)	8	TBD	TBD



Lower Snake River Dam

Single Track Railroad



Freight Intermodal Port Facility

Multi Track Railroad



Freight Intermodal Rail Facility

Waterway Freight Corridor

Study Area



Idaho

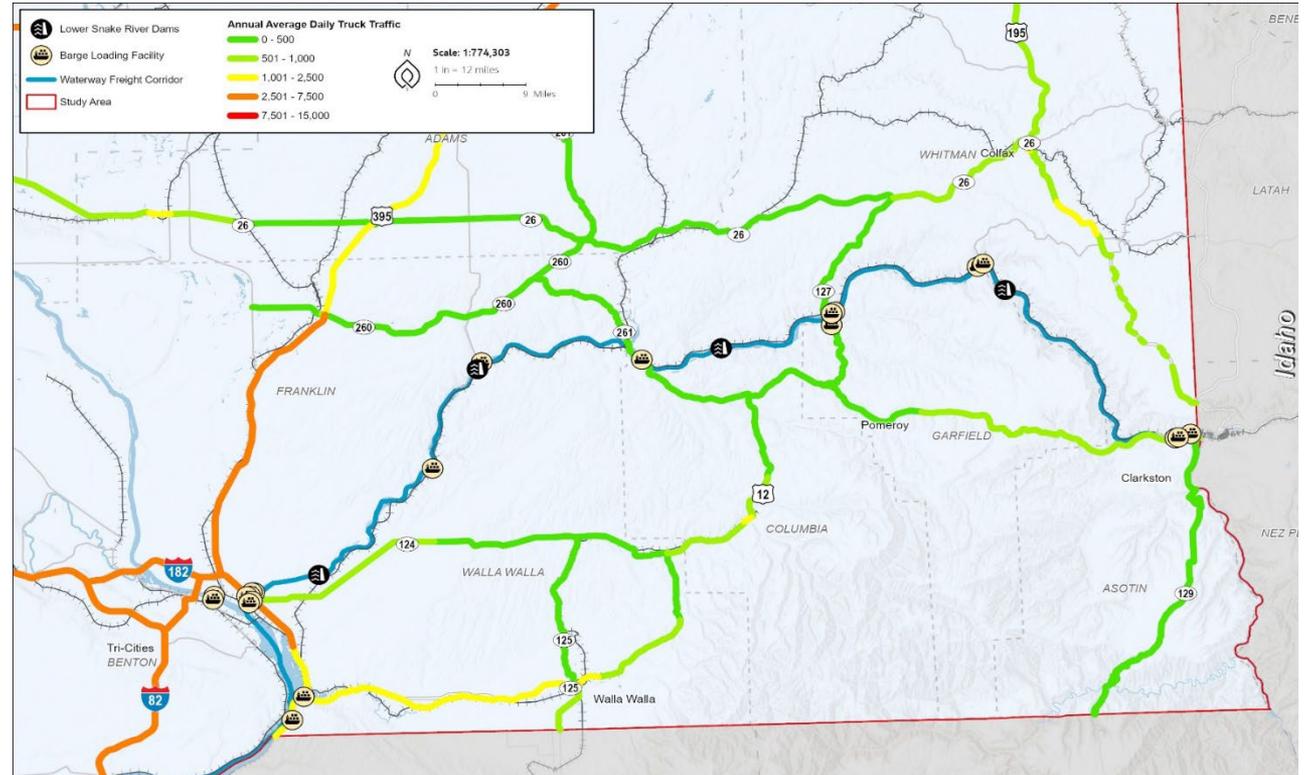


# Roads



## Task 2: Highway Existing Conditions

- All roads near grain terminals are below capacity
- Intersections yet to be determined





## Task 2: Highway Existing Conditions

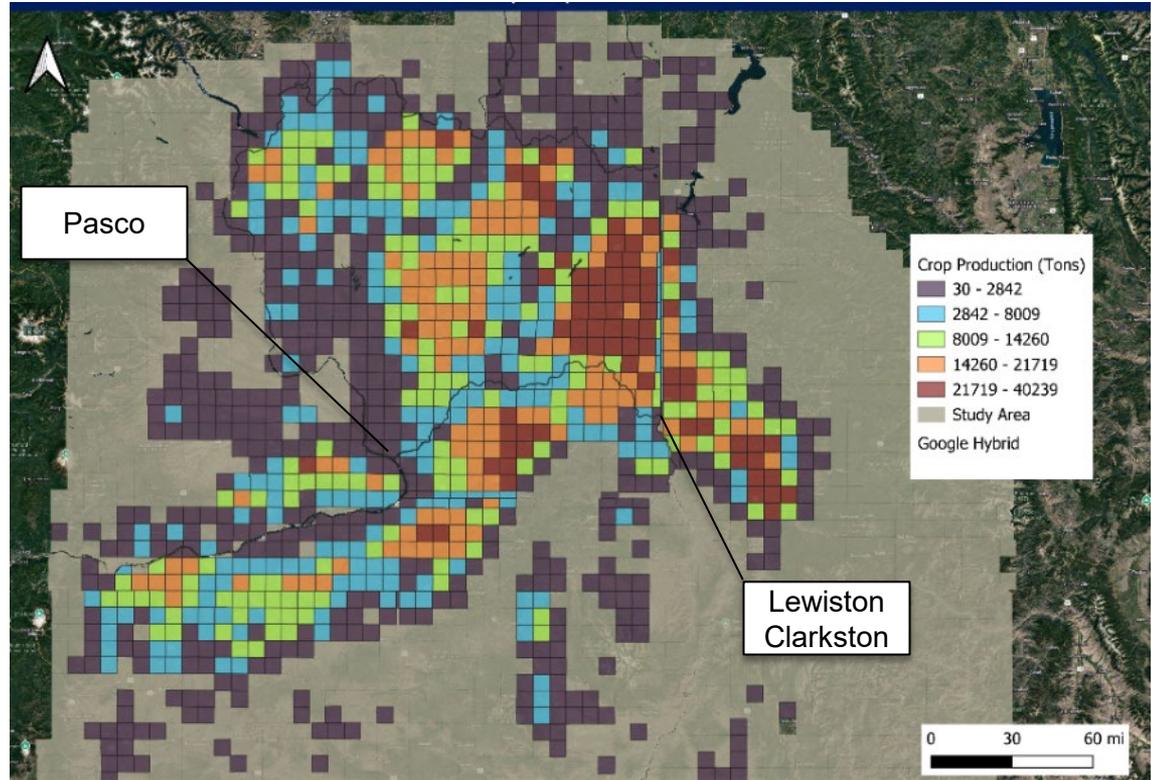
- Many bridges and roadways currently past due



# Total Logistics Cost Model

## Task 2: Wheat

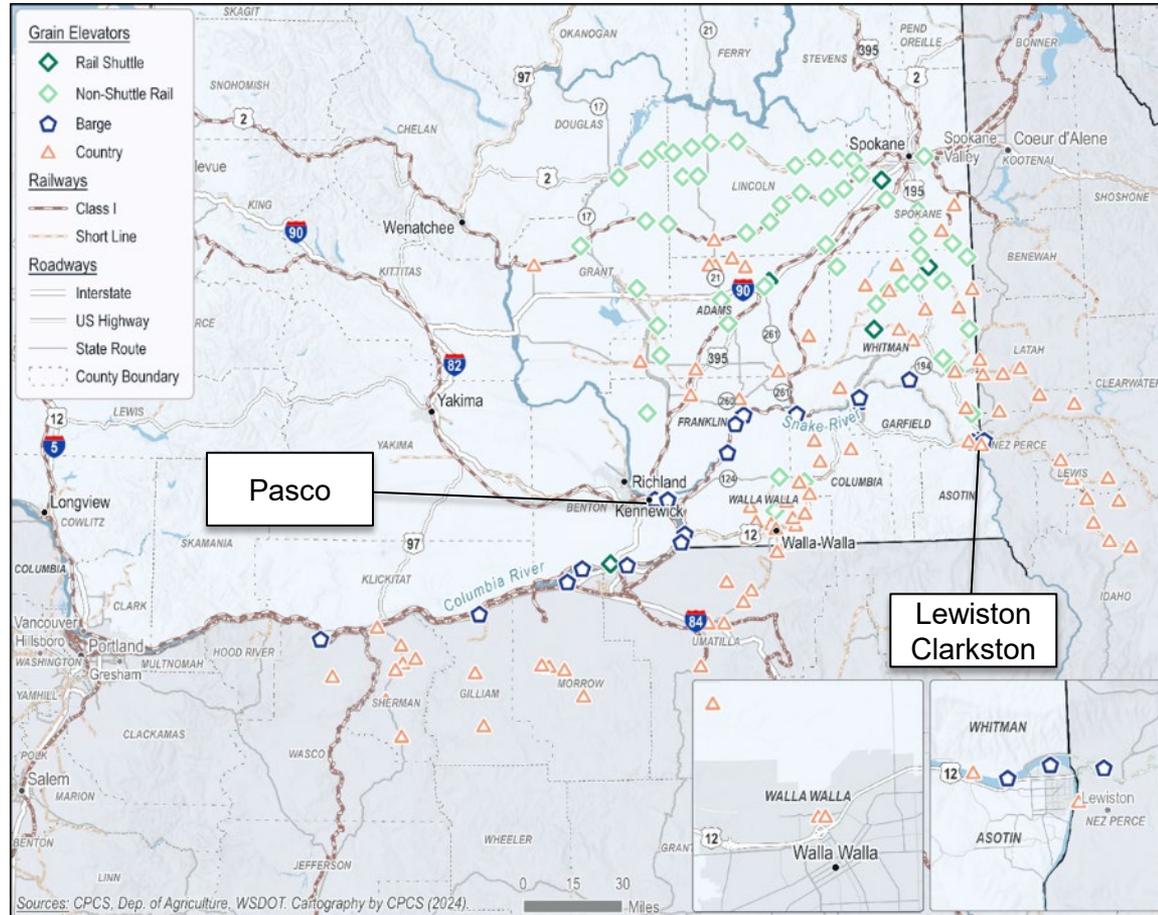
- Study area – excluding townships with less than 1,000 bushels of wheat production (1 truckload) from model





## Task 2: Wheat

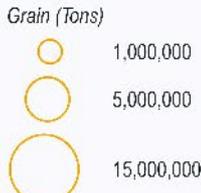
- 174 Grain elevators in Eastern Washington, Central Idaho, and Northeast Oregon
- Over 4.3 Million connections between townships and export ports
- Iterative process



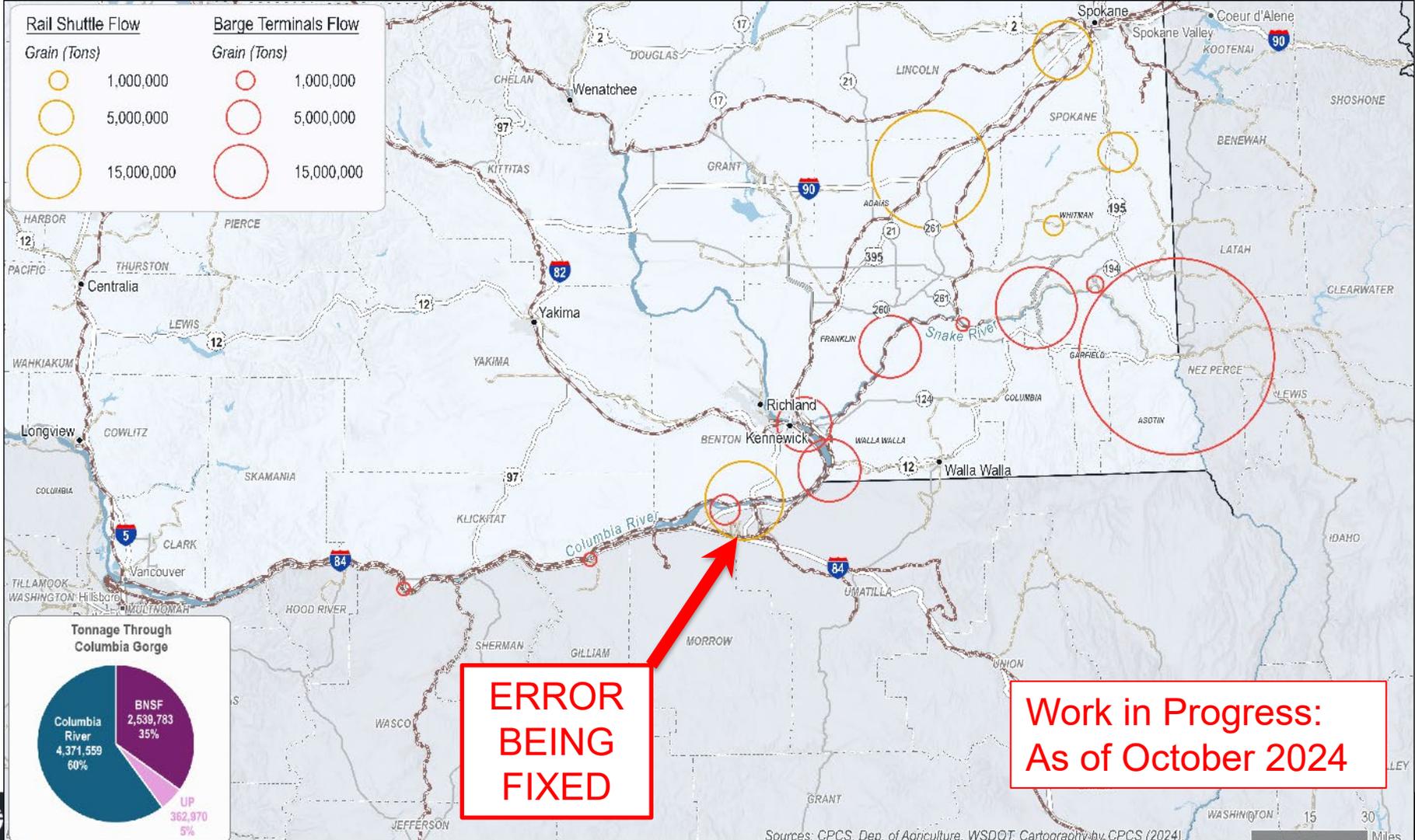
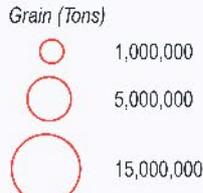
# Model Status

- All model images you see are a work in progress
- Existing Conditions model is almost through JTC review
  - Conducted by WSU
  - Review has been quite thorough
  - Review has been quite welcome and helpful
  - We will not publish these model results until JTC has completed their review

**Rail Shuttle Flow**

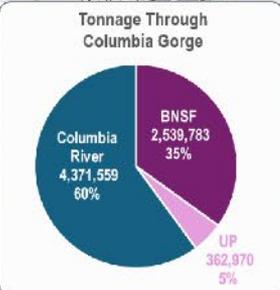


**Barge Terminals Flow**



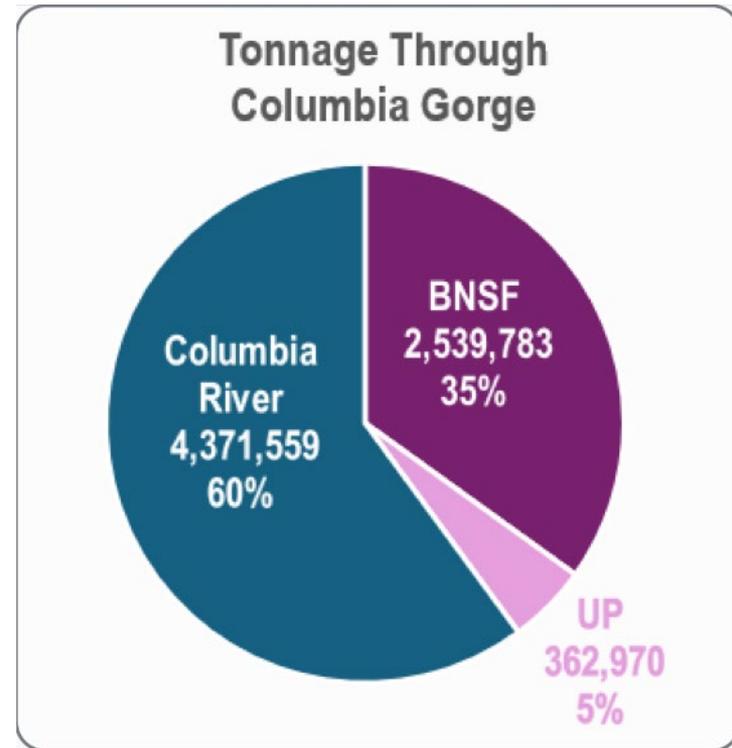
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BEING  
FIXED**

**Work in Progress:  
As of October 2024**



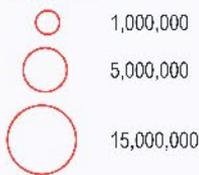
## Task 2: Wheat

### Columbia Gorge Model Throughput



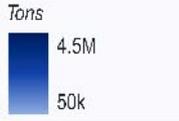
### Barge Terminals Flow

Grain (Tons)



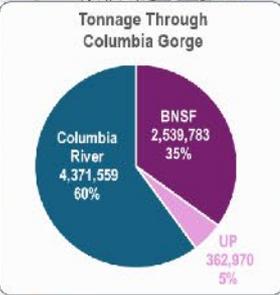
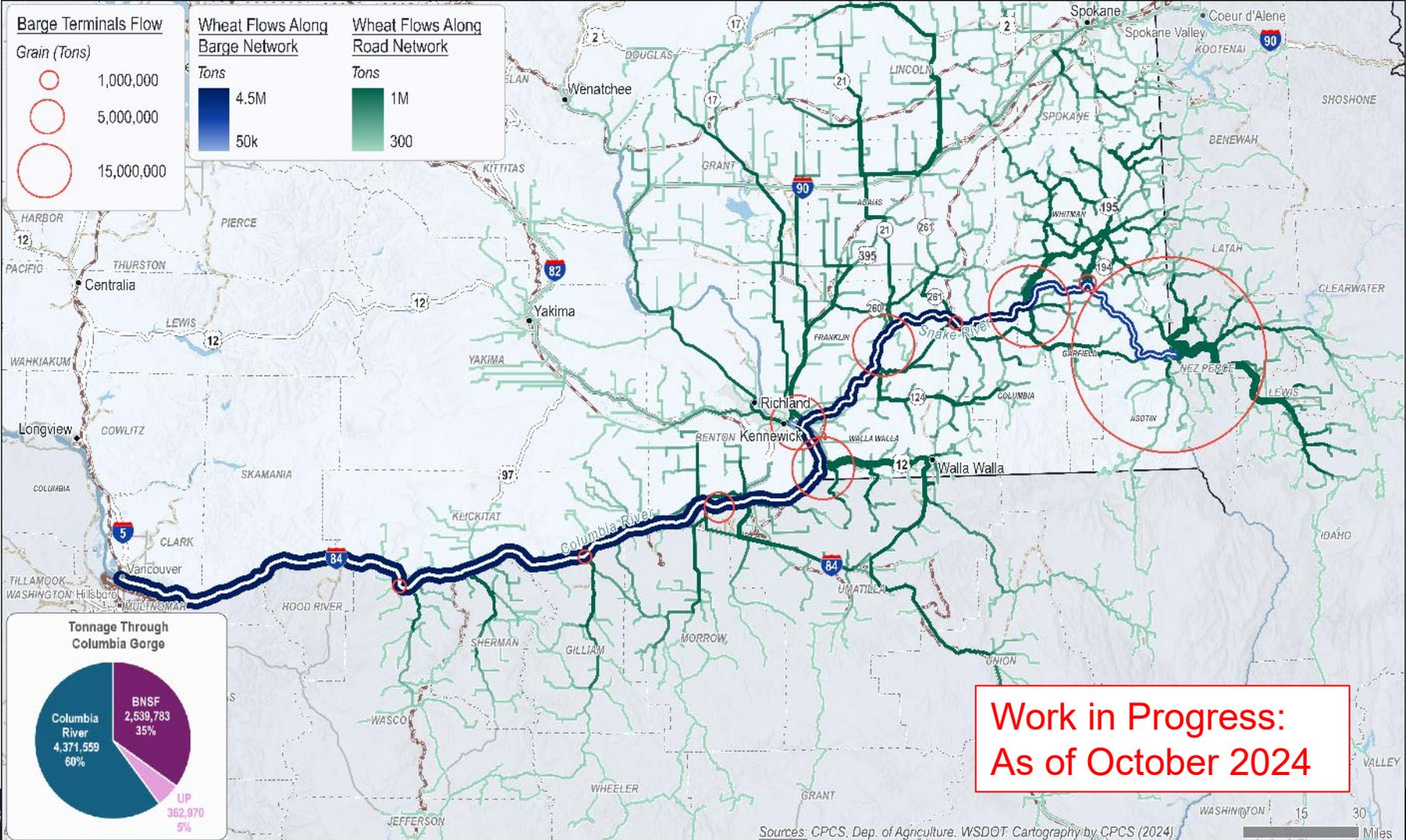
### Wheat Flows Along Barge Network

Tons



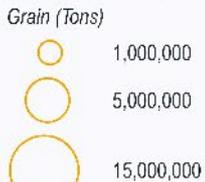
### Wheat Flows Along Road Network

Tons

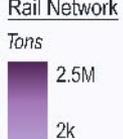


**Work in Progress:  
As of October 2024**

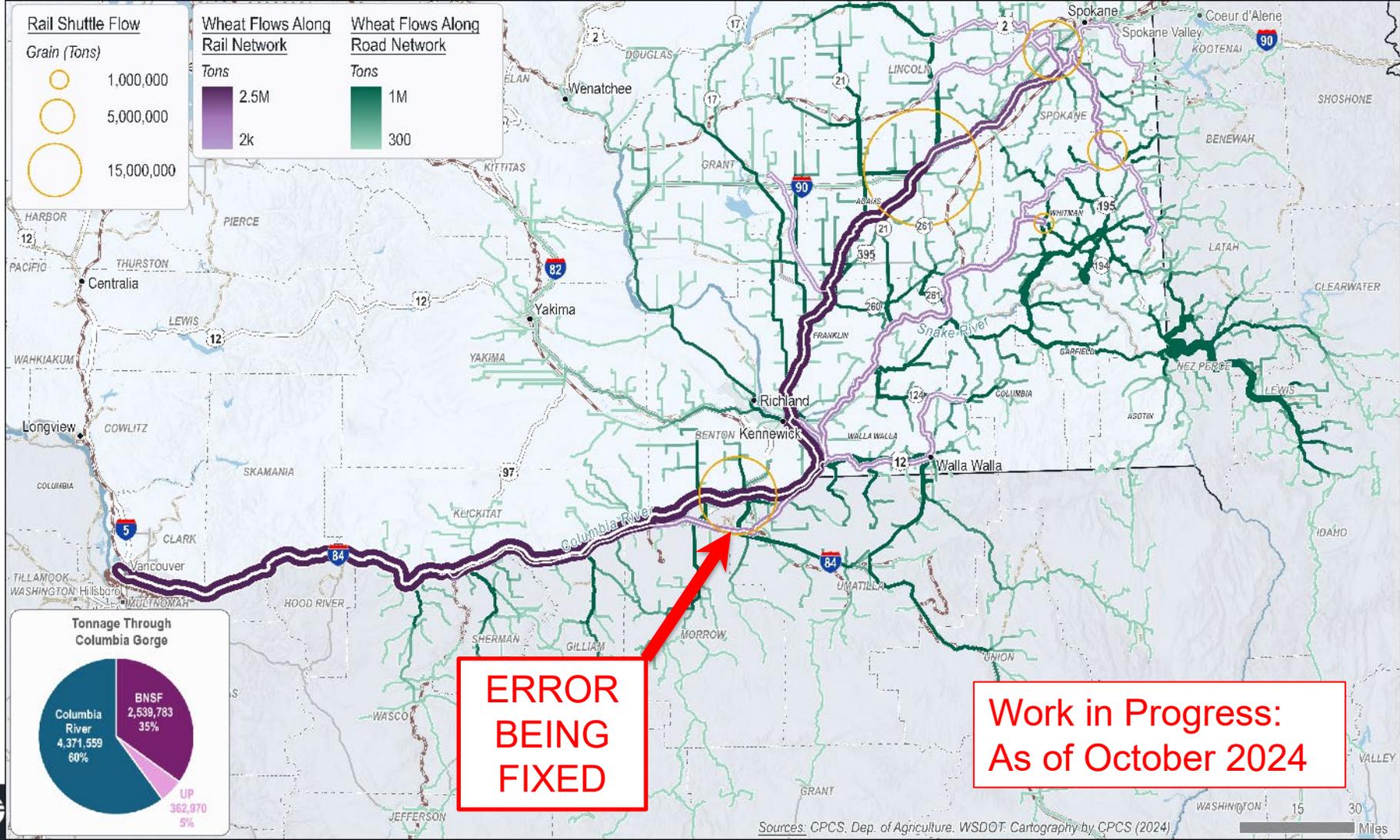
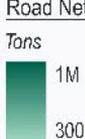
### Rail Shuttle Flow



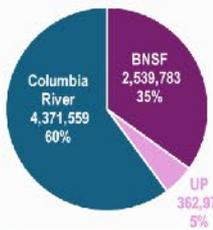
### Wheat Flows Along Rail Network



### Wheat Flows Along Road Network



### Tonnage Through Columbia Gorge

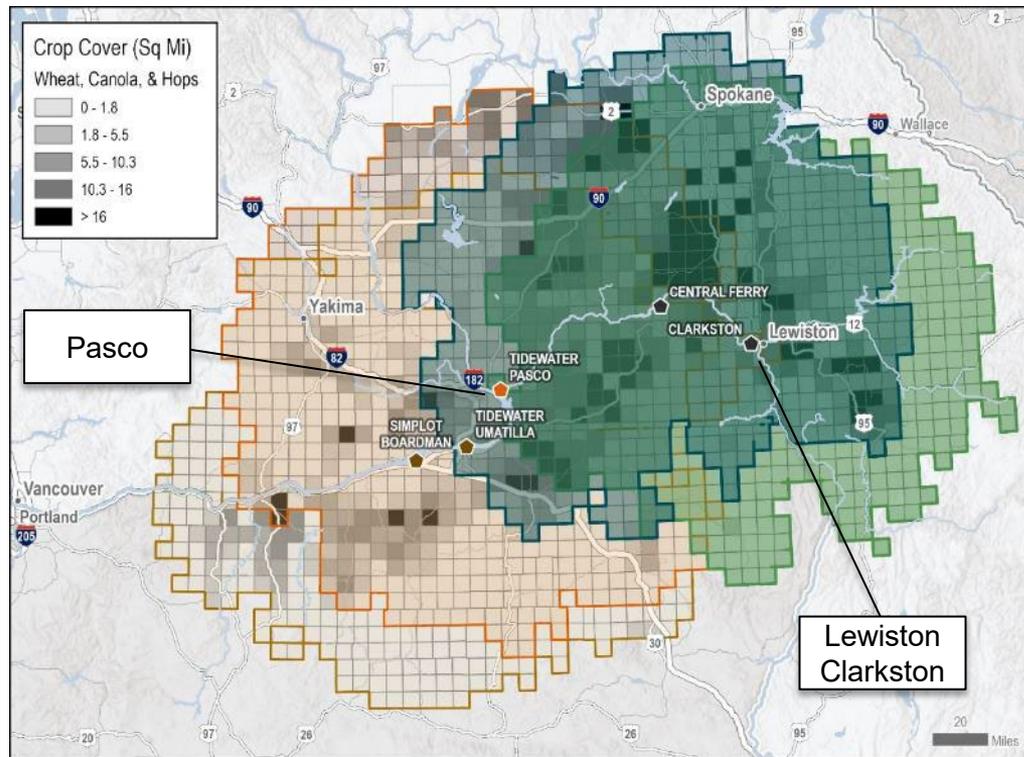


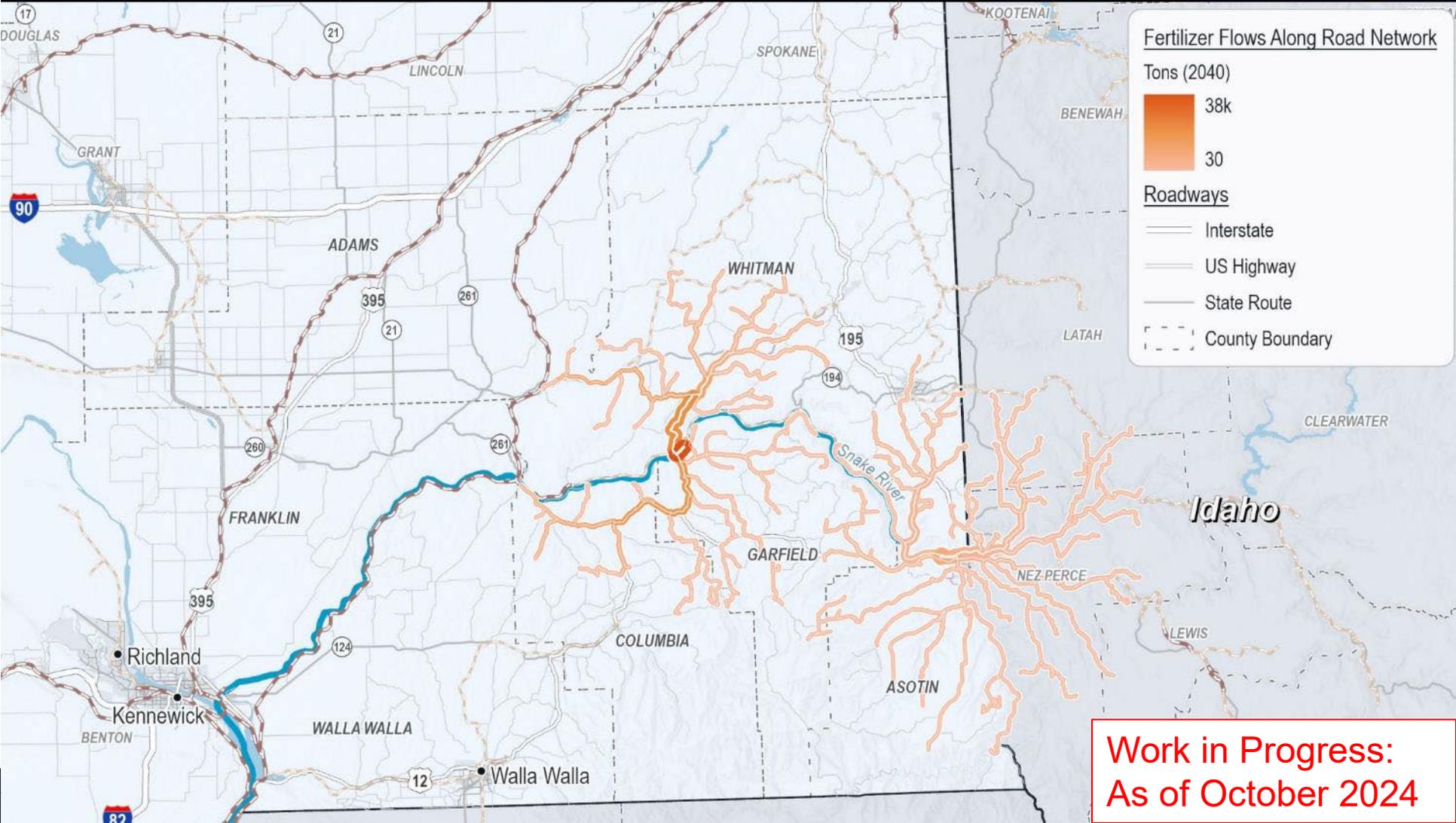
**ERROR  
BEING  
FIXED**

**Work in Progress:  
As of October 2024**

## Task 2: Fertilizer

- Inventoried fertilizer terminals to add to model for use in later model runs
  - Barge: Pasco, Umatilla, Boardman
  - Rail: Pasco, Tokio, Othello, Plymouth





**Work in Progress:  
As of October 2024**



# Task 2: Wood Products



# Engagement



## Online Open House – Visitations

- **When:** November 15 – December 6
- **Purpose:** Introduce the study to the broader public
- **Visitors:** English - 6,600 Views with 2,200 unique  
Spanish - 108 Views with 13 unique



## 2024 Status Report

- **Purpose is to describe study status as of October 2024**
- **Structure of Report**
  - Introduction
  - Barge Traffic
  - Rail Traffic
  - Highway/Truck Traffic
  - Summary of Engagement Conducted to-date
  - Next Steps
- **Report has completed JTC and USACE review**
- **To be Published December 16, 2024**



## More Information

[Study Website](#)



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Department of Transportation**

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