OREGON
WATER RESOURCES DEPARTMENT

SWIMS TAG Meeting #1

July 15th, 2025

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Agenda

1. **Welcome and introductions** *(9:05 – 10:00)*
2. **TAG overview** *(10:00 – 10:30)*
3. **SWIMS project introduction** *(10:30 – 10:50)*
4. **Next steps and Q&A** *(10:50 – 11:00)*

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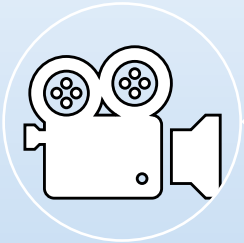
Meeting Rules

Use hand raise feature

Encourage interaction (can put questions and comments in chat)



Meetings will be recorded and posted to website

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Introductions

Tell us about:

- Your background and experience
- Why you're interested in participating
- What you hope to gain from this experience

Notes:

- Up to three minutes
- Hold questions until end of segment
- Presenter will call on people

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SWIMS Project Overview

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Legislative Directive

Legislature (2023) provided resources to update the statewide Water Availability Reporting System

Deliver accurate, up-to-date monthly surface **water budgets** for basins statewide

Expected completion date: **January 2030**

What is Water Availability?

- Describes the amount of surface water available for allocation in Oregon
- Water availability is derived using streamflow measurements, water use, and statistical modeling
- Water Availability Reporting System (WARS) accounts for impacts of permitted water use on streamflow

Partner Engagement Process

Internal OWRD Working Group	• Includes personnel impacted by project work
External Technical Advisory Group (TAG)	• External subject matter experts providing feedback on modeling framework
Public Participation	• Public meetings with project updates

Questions?

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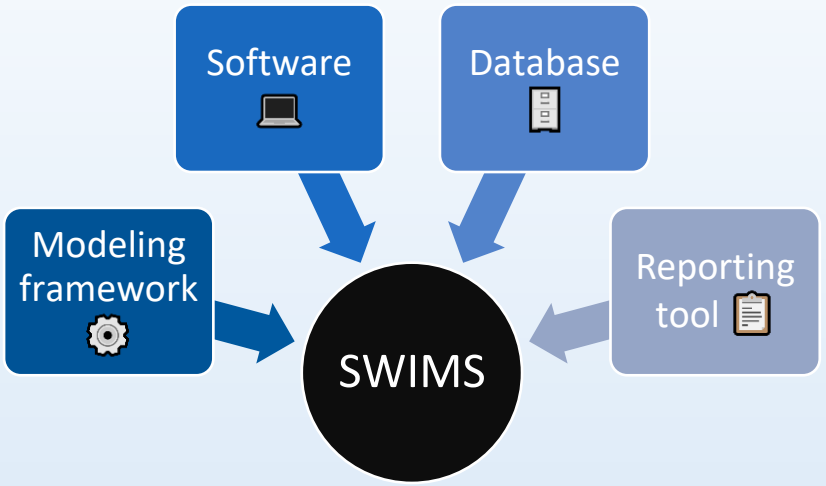
SWIMS TAG Overview

Technical Advisory Group

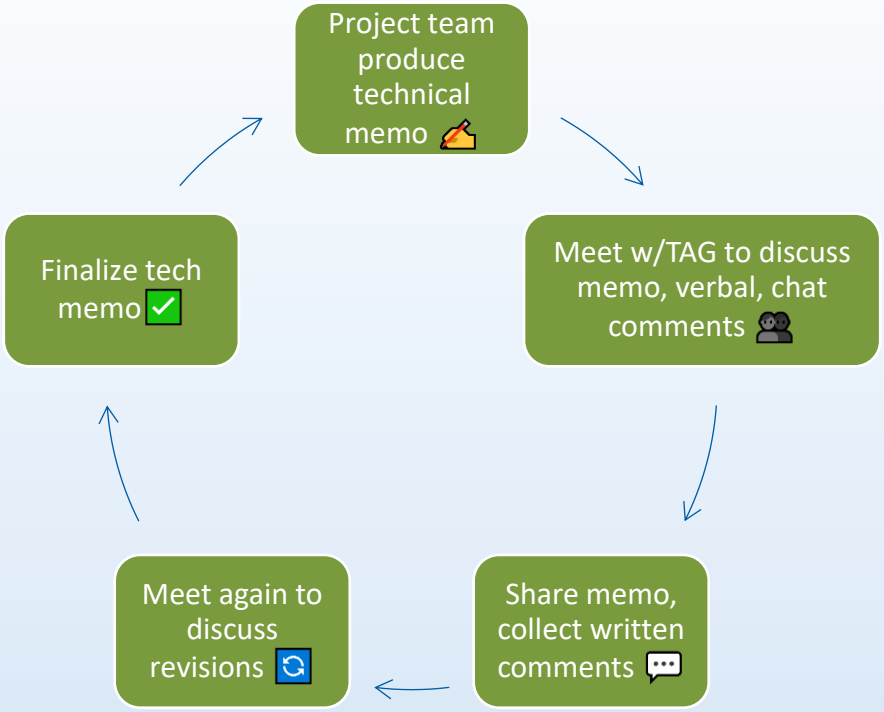
- OWRD is carrying out project to develop Surface Water Information Modeling System (SWIMS)
  - Update to Oregon's water availability model and information
- TAG created to support development of water availability modeling framework:
  - Seek advice from subject matter experts
  - Establish buy-in for water availability model



Components of SWIMS. The modeling framework is represented as data inputs and methods for calculating water availability.

Engagement Model

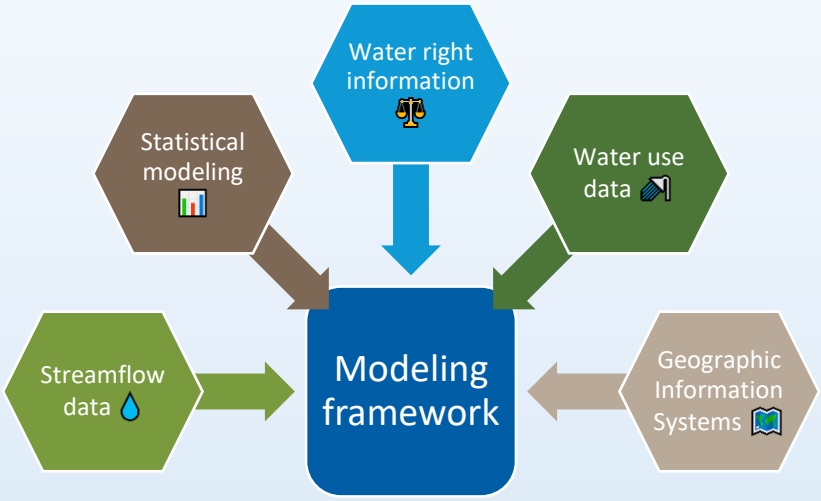
- Collect feedback to inform development of water availability modeling framework
- Maximize participation during meetings
- Option to comment on tech memo with written feedback
- Preferred method for providing written comments?



Proposed engagement model between TAG and project team to exchange feedback and inform model development.

Scope of Feedback

- Consider core values of development:
  - Accessibility
  - Scientifically defensible
  - Updatable
  - Reproducible
- Data-driven, objective, evidence-based recommendations
- Water availability policy discussions are outside scope of TAG



Ideal feedback will relate to the assumptions, data, and methods used to develop the modeling framework.

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Meetings and Conduct

- All TAG meetings will be recorded, transcribed, and posted on the SWIMS webpage
- Planning to share TAG meeting summaries at public meetings
- Members are expected to prepare and engage during meetings
- Membership is expected to continue through July 2027
- Meetings will be virtual – interest in hybrid?

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Meeting Schedule

- Meetings and content are scheduled to occur quarterly
- Two hours will be allotted for each meeting
- Revisions to tech memos will also be discussed as necessary
- Please let us know of any scheduling conflicts

Date	Content
7/15/2025	Introductions; intro to project; discuss roles and responsibilities
10/7/2025	Planned hydrologic investigations; schedule
1/6/2026	Disturbance index; stationarity; gap tolerance; correcting short-record flows;
4/7/2026	Watershed boundaries; watershed characteristics; routing/nesting
7/7/2026	Expected demands; consumptive use; OpenET
10/6/2026	Surface water-groundwater interactions
1/5/2027	Model development; model selection; model calibration
4/6/2027	Calculating ungaged natural streamflow; correcting estimated flows
7/6/2027	Revisions

Questions?

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Oregon's Surface Water Availability Model and the SWIMS Project

What is Water Availability?

- Describes the amount of surface water available for allocation in Oregon
- Water availability is derived using streamflow measurements, water use, and statistical modeling
- Water Availability Reporting System (WARS) accounts for impacts of permitted water use on streamflow

Water Availability Model

- Water availability model is an allocation tool, not real-time management tool
- Purpose of water availability model
  1. Limit appropriations such that applicants can expect use of water reasonable amount of time
  2. Limit situations of regulation by OWRD
- Most junior user can expect to meet demands 80% of time
  - [OAR 690-400-010 (11)(a)(A)]

Water Availability Model

- Water availability derived from natural streamflow
- Relies on geostatistical approach to estimate flow statewide
- Considers water use (both surface and groundwater) when characterizing natural flow regimes
- Water availability considers all expected demands

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Challenges to Address

1. Current information (streamflow, water availability, etc.) represents older climate period and requires finer resolution.
2. Water use information needs to be updated.
3. Current gage network more designed for management rather than science and lacks information on natural flow conditions.
4. Backlog of streamflow records to be published.
5. Current system for updating model and maintaining system is semi-functional.

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Expected Outcomes

- Water availability information for 1991-2020
- Updatable, repeatable water availability workflow
- Software system for performing updates
- Modeling framework informed via TAG
- Peer-reviewed Open File Report

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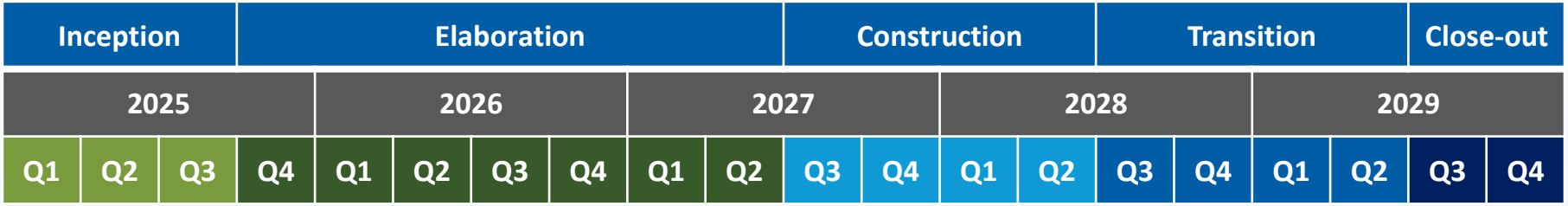
Project Timeline



Inception: understand risks and decisions to be made, outline requirements

Elaboration: analyze information, specify model and system requirements

Construction: build system

Transition: formally calculate water availability

Close-out: implement changes into Department operations

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Summary

- OWRD's water availability model is allocation and planning tool, not real-time management tool
- SWIMS project aims to update model framework to calculate water availability information for 1991-2020
- TAG to provide feedback on data, methods, and assumptions used in model framework

Next Steps

- Send invite for next TAG meeting (10/7)
  - Next meeting: scope of work to develop modeling framework
- Send prep material
- Post meeting items to webpage

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SWIMS webpage

Questions?