



PUGET SOUND ECOSYSTEM
MONITORING PROGRAM

Advancing Spatial Data Collaboration for Ecosystem Recovery:

*An Overview of the PSEMP Spatial Data Work
Group*

Coordinators

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Setting the Stage: Why Spatial Data Coordination Matters

- **Puget Sound recovery** is inherently a multi-jurisdictional, data-intensive challenge — tribes, state agencies, federal programs, local governments, and consultants are all working in the same landscape with different data
- **Coordination and Data:** fragmented datasets, duplicated effort, unclear authoritative sources, and a lack of coordination on standards and priorities impede good decisions
- **Coordination can Improve Investments**

What if there was a dedicated regional forum to help solve this together?

PSEMP: The Broader Program Context

A knowledge sharing network

The Puget Sound Ecosystem Monitoring Program (PSEMP) is a collaborative network of subject matter experts from many monitoring organizations and different parts of the region. Together, they generate, organize, synthesize, and communicate scientific information, across political and organizational boundaries, to track ecosystem conditions that directly address management and science questions critical to Puget Sound recovery.

Diseases Work Group

[Visit Website](#)

Forage Fish and Food Webs Work Group

[Visit Website](#)

Marine Birds Work Group

[Visit Website](#)

Marine Mammals Work Group

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Marine Waters Work Group

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Nearshore Work Group

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Salmonids Work Group

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Spatial Data Work Group

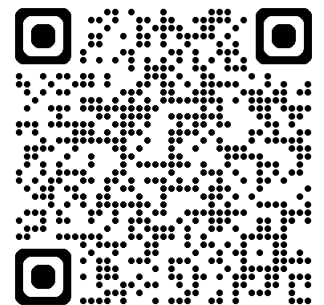
[Visit Website](#)

Stormwater Work Group

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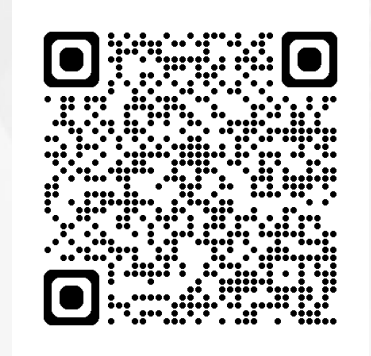
Toxics Work Group

[Visit Website](#)



What is the SDWG?

PSEMP work group focused on improving how spatial data supports ecosystem recovery and decision-making.



We support collaboration to:

- Address shared spatial data challenges
- Connect data users, producers, and decision-makers
- Identify data gaps and coordination needs
- Promote data consistency, access, and shared standards

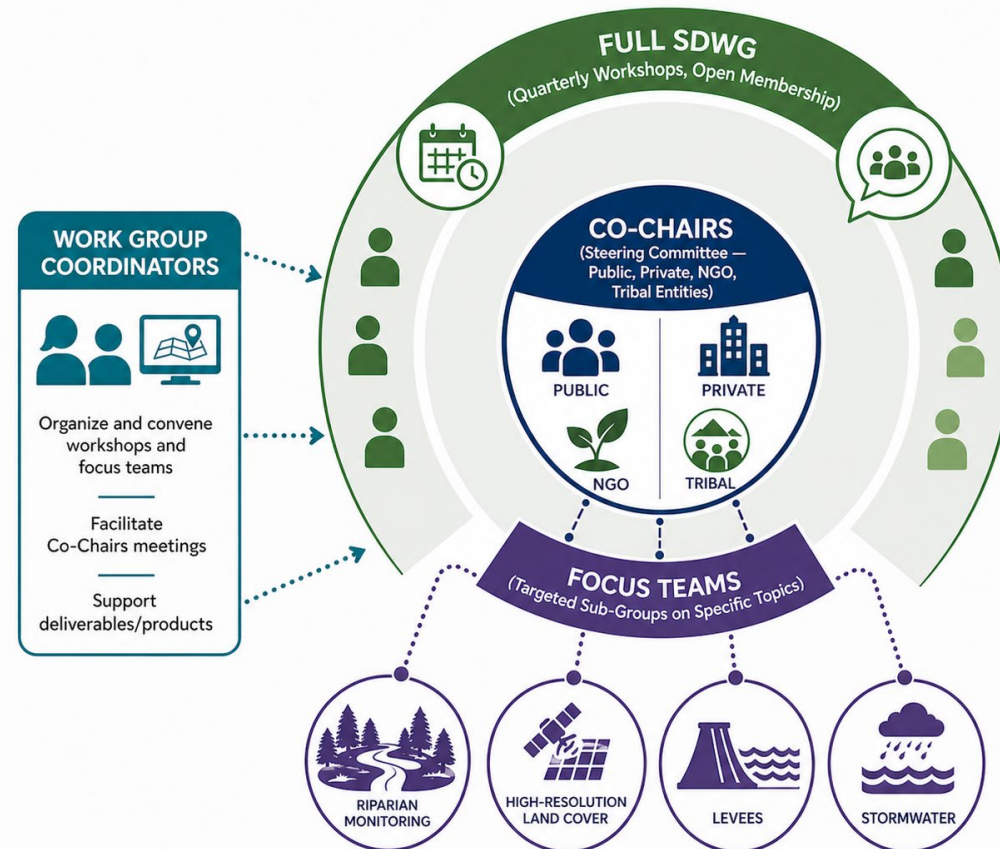


Goal: Make spatial data more useful for planning, management, and recovery across Puget Sound and Washington.

<https://psemp-spatialdataworkgroup-wa-psp.hub.arcgis.com/>

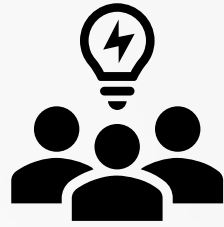
How the SDWG is Structured

Formed in 2021 following a 2019 workshop that identified the need



What We Do: Core Activities

- **Quarterly Workshops** — deep dives on priority spatial data topics with 50+ regional practitioners
- **Data Recommendations** — curated guidance on authoritative datasets for common use cases
- **Focus Teams** — time-limited groups tackling specific, bounded spatial data challenges
- **Special Projects & Data Products** — applied work products like the Land Cover Demonstration Project



Spotlight: Workshops

Past Workshop Materials

- February 25, 2026: [Hydrography Workshop](#)
- September 9, 2025: [LiDAR Workshop](#)
- March 26, 2025: [Land Cover Workshop](#)
- September 25, 2024: [Stormwater Workshop](#)
- July 9, 2024: [Riparian Workshop](#)
- March 23, 2023: [Land Cover](#)
- October 25, 2022: [Spatial Data and Equity](#)
- June 23, 2022: [Spatial Data for Riparian Monitoring](#)
- March 3, 2022: [Tidal Restrictions](#)
- November 4, 2021: [SDWG Basics and Workplan](#)
- October 7, 2021: [SDWG Orientation](#)

Mapping is never 'done'



- Lidar is high resolution and high accuracy – and becomes 'outdated' quickly like imagery because features change rapidly
- To supply best science, and 'update deficient data' → need a recollection plan

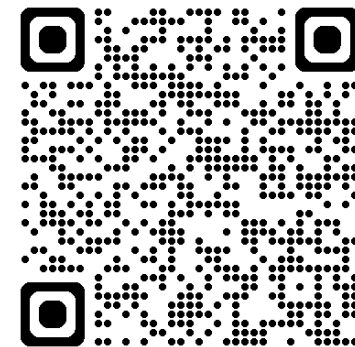
Provides stable management and monitoring techniques for state, local, tribal initiatives

Stay up-to-date with technology advancements or new collection techniques

Change and trend analysis, historical data increases in value for comparison and updated data critical to understand patterns



Spotlight: Data Recommendations



About Data Recommendations

In order to provide a resource to the spatial data community in the Puget Sound region and Washington State, the Spatial Data Work Group has identified the following recommended datasets, organized by topic area. Recommendations include links and guidance on applied use. The recommendations continue to be built out over time to identify recommended datasets for additional topic areas. If you have questions about these recommendations or would like to recommend datasets or topic areas to add to this page, contact SDWG@esassoc.com.

Please note that information on datasets changes over time as they are updated. We recommend confirming information on this page with the data source prior to use.

[← Back to SDWG Landing Page](#)

Explore data recommendations by topic

Floodplain

Datasets to support understanding flood risk, floodplain condition, restoration opportunities, and regulatory mapping.

[Jump to Floodplain ↗](#)

Tree Canopy & Woody Vegetation (Land Cover)

Land cover and canopy datasets for tracking urban forestry, habitat, climate resilience, and related planning efforts.

[Jump to Tree Canopy ↗](#)

Wetlands

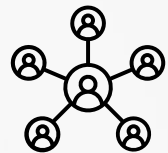
Wetland inventories and related datasets for regulatory review, restoration planning, and ecological assessments.

[Jump to Wetlands ↗](#)

Sea Level Rise

Sea level rise and coastal inundation datasets to support vulnerability assessments, adaptation planning, and coastal project design.

[Jump to Sea Level Rise ↗](#)



Spotlight: Focus Teams



Riparian Monitoring

The SDWG is convening a series of meetings and workshops to..

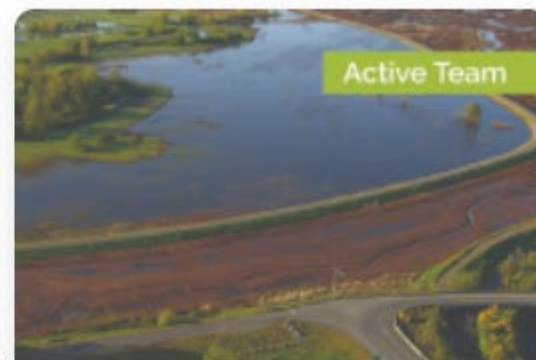
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High-resolution Land Cover Focus Area

The SDWG plans to convene conversations to explore the...

[Learn More](#)



Levee Spatial Data Focus Area

The levee spatial data focus team dedicated time to developing ...

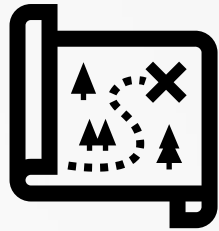
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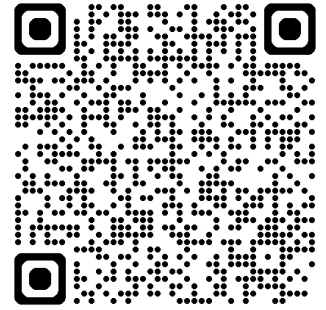
Stormwater Spatial Data Focus Area

The stormwater spatial data focus team plans to convene a..

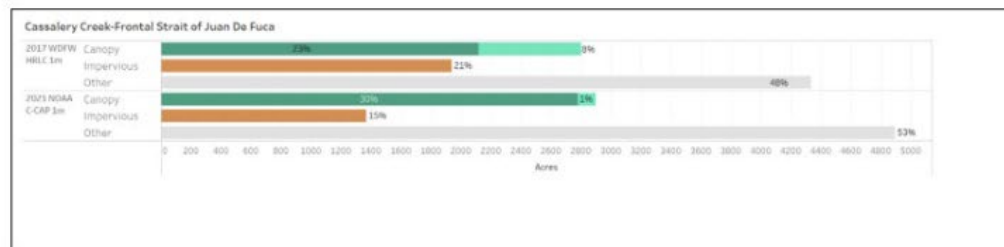
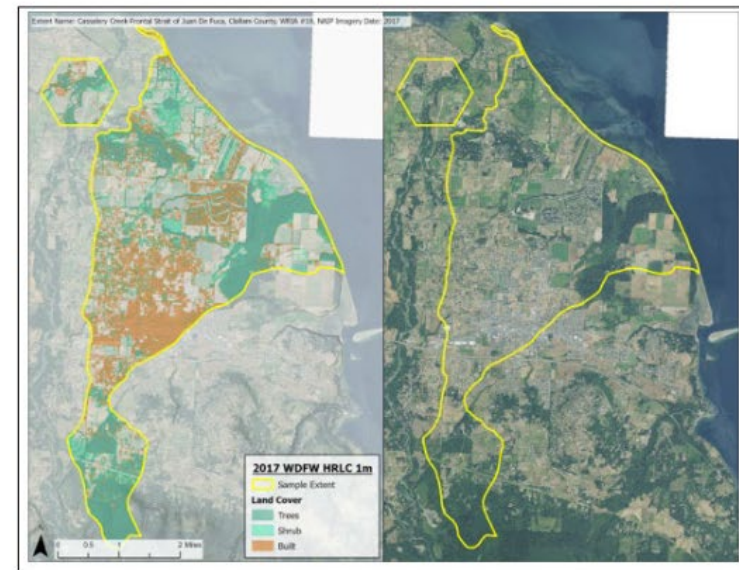
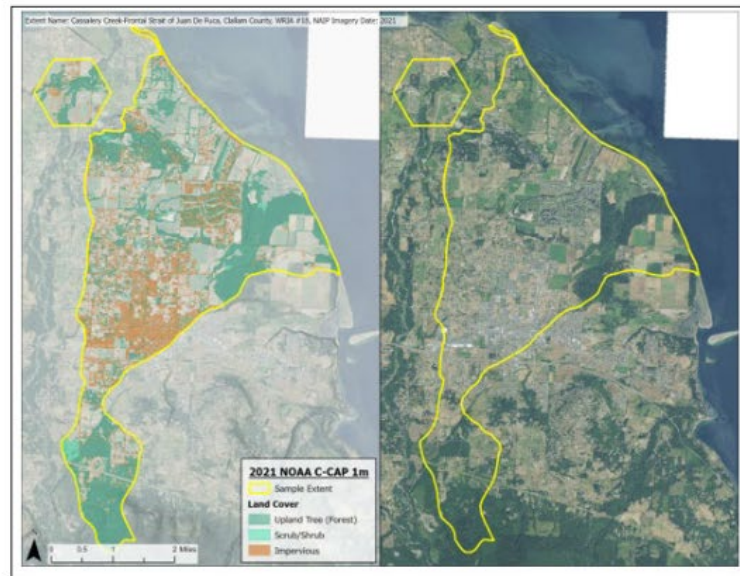
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Spotlight: Special Projects & Data Products



Clallam County – Cassalery Creek-Frontal Strait of Juan De Fuca



General Observations: This location shows 30% of the extent mapped as Upland Tree (Forest) and 1% Scrub/Shrub for 2021 NOAA C-CAP 1m vs 23% of the extent mapped as Trees and 8% as Shrub for the 2017 WDFW HRLC. Similarly, 15% of the extent is mapped as Impervious for NOAA C-CAP while 21% of the extent is mapped as Built for WDFW HRLC.

SDWG Hub Site



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Spatial Data Work Group

- Includes archived workshop recordings & slides, data recommendations, Focus Team updates, member resources, contact info
- It's a persistent, growing knowledge base — not just a meeting calendar

The mission of the Spatial Data Work Group is to advance the effective use of spatial data for ecosystem recovery and resilience, supporting collaboration, improving understanding of available data, and building shared understanding of regional conditions and challenges.

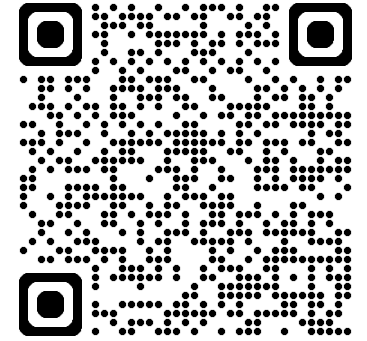
Who Benefits & Why Join

- **GIS Analyst / Data Scientist:** access to curated data guidance, workshops on technical topics (LiDAR, land cover, hydrography), peer network
- **Resource/Program Manager:** stay informed on regional data priorities; influence what problems get tackled
- **Agency/Tribal Staff:** coordinate on shared data challenges without reinventing the wheel
- **Consultants/Private Sector:** understand what authoritative data products exist and where gaps are; contribute expertise

Core value proposition: *expand your network, sharpen your practice, and contribute to outcomes that matter*

How to Get Involved

1. **Attend a workshop** — quarterly, open to all, archived if you miss one
2. **Join or propose a Focus Team** — if you have a specific data challenge, this is how it gets traction
3. **Use and contribute to Data Recommendations** — use what's there; flag gaps or new authoritative sources
4. **Join the mailing list / member network** — stay connected to the regional spatial data community



Scan the QR Code

*Email:
SDWG@esassoc.com*

Questions?

