

Puget Sound Partnership
Ecosystem Recovery Board Management Brief
October 26, 2023 – Topic 2

TOPIC:

Collective Impact for Salmon, Stormwater, and Thriving Communities

MEMO STAFF CONTACT:

Mary Ann Rozance, South Central LIO Coordinator, maryann@cascadiaconsulting.com

PRESENTERS:

See [Agenda](#) (Attachment 1).

TYPE OF PRESENTATION:

- Oral presentation for a decision
- Oral presentation for discussion
- Oral presentation for information only
- Written briefing only
- Other: _____

ISSUE/QUESTION:

The South Central Local Integrating Organization (LIO) will present to the Ecosystem Coordination Board on the significant challenges they face in effectively integrating stormwater management with habitat and ecosystem recovery efforts, particularly in urban watersheds. The South Central LIO asks the Ecosystem Coordination Board (ECB) for support in advancing legislative, funding, and programmatic actions that incentivize and support regional efforts to coordinate and advance regional stormwater goals, especially where they intersect with salmon recovery and community goals (e.g., co-benefits for climate resilience, access to parks).

Our ask includes the following:

- Promote the goals that were agreed upon during the Stormwater Summit series: (1) regional stormwater parks; (2) roadway BMPs for treating 6PPD-Q and more; (3) flow control via green stormwater infrastructure and detention ponds; (4) target sources of pollutants through use of source control measures.
- Support amending investment structures to allow flexible funding for multi-benefit stormwater projects and cross-jurisdictional collaboration, drawing from the success of the Floodplains by Design funding program.
- Support legislation that promotes policies and funding for integrating stormwater management and salmon recovery efforts.
- Convene a limited series of focused meetings with representation from the ECB, including South Central and other LIOs, State, Federal, Tribal, NGOs, and local governments to identify funding and policy pathways for integrating stormwater and salmon recovery efforts in-line with a broader suite of community goals.

BACKGROUND AND KEY CONTEXT:

Introduction to the Problem

The South Central Local Integrating Organization (LIO) faces significant challenges in effectively integrating stormwater management with habitat and ecosystem recovery efforts, particularly in urban watersheds (see Attachment 2 [video](#)). Currently, clean water regulations and funding authorities tend to focus on the individual jurisdiction or facility level, and stormwater management efforts are siloed from habitat and ecosystem recovery efforts. Although modelling indicates that larger scale stormwater retrofits strategically located within watersheds hold significant potential for pollutant reduction and for addressing historic pollution in overburdened communities, the scope and scale of these projects quickly exceeds the capacity and authority of local stormwater, roads, and parks funding streams. At the same time, a growing body of research confirms the lethal impacts of toxic tire dust runoff and need for action to research, apply, and support effective best management practices. Without controlling stormwater pollution and strategically aligning investments to seek multiple benefits and prioritize retrofits in critical habitat areas, we undercut the effectiveness of the significant investments made towards salmon habitat protection and restoration by state agencies, Tribes, local governments, and non-profits.

There is an urgent need for a collective effort to better integrate and coordinate public investments in controlling stormwater pollution and restoring habitat where they will achieve the best outcomes for the environment and communities impacted by water pollution. When integrated, stormwater management and habitat restoration projects can achieve a multitude of co-benefits, including flood and erosion control, water quality improvement, climate resilience, healthier habitat and ecosystems, and improved access to green spaces – particularly important for underserved communities who are disproportionately impacted by heat-related stressors, and poor water quality and habitat. Single-purpose funding authorities for stormwater, roads, and parks can create barriers to prioritizing projects where they will have the most benefit and supporting multi-benefit projects that span funding sources. Historically, water quality requirements structured around general permits and point discharges have tended to drive prioritization of investments within jurisdictions vs. basins.

South Central LIO Activities

Organizations within the South Central LIO have been working across silos to align stormwater and habitat recovery to facilitate more comprehensive and holistic ecosystem recovery and leverage funding resources. This has been done across management scales—from projects like the [Bear Creek restoration](#) project in King County, to Seattle and Kirkland developing stormwater parks, to the development of a [Stormwater Retrofit Tool](#) to intersect with habitat protection and restoration planning.

In addition, South Central LIO entities collectively identified opportunities to integrate stormwater management with habitat and ecosystem recovery via regional stormwater summits and technical workshops with practitioners from in May 2021 through May 2023. King County convened a regional stormwater summit in May 2021 followed by three technical workshops focused on regional actions to achieve the best outcomes for water quality, communities, and Puget Sound recovery. One hundred and forty practitioners representing 50 municipalities and organizations joined these technical workshops to discuss ambitious shared goals to drive regional action and collaboration. A second regional stormwater

summit on May 31, 2023, brought together leadership from state and federal agencies, Tribes, counties, and cities to review four proposed regional stormwater goals that can help to focus joint efforts at a watershed scale. These discussions resulted in participant agreement of four ambitious Regional Stormwater Action Goals that incorporate holistic and multi-benefit planning and design for achieving stormwater quality improvement and potentially incorporate habitat recovery goals (see [Attachment 3](#)). The goals and feasibility assessments were developed at a King County scale and are informed by input from practitioners across central Puget Sound and beyond. The four goals are:

- *Goal 1 Build 30 strategically sited regional stormwater parks across King County.* This action would reduce pollutants on a basin-wide scale, while providing new green space for communities in unincorporated and incorporated areas. Stormwater parks can be designed to remove pollutants (e.g., nutrients, heavy metals, polychlorinated biphenyls, and others) and if the 30 parks are strategically sited, they could effectively treat more than 7 billion gallons of stormwater per year, reducing 14%-60% of upstream pollutants.
- *Goal 2 Treat runoff from 100 miles of roadways through BMPs that remove 6PPD-q and more,* could be aligned to target coho salmon habitat and locations where fish passage projects are restoring access to historic habitat. We know that 6PPD-Q leaches from tires and kills coho salmon; integrating BMP installation that removes 6PPD-Q with planned roadwork and coho habitat could reduce overall impacts on spawning coho salmon.
- *Goal 3 Provide flow control to 5,000 acres through a mix of green stormwater infrastructure and new or retrofitted detention ponds,* would target fish habitat restoration areas and historically under-resourced areas with known flooding concerns. Installing BMPs and green stormwater infrastructure can support regional flow control, and reduce stormwater runoff that causes flashy streamflow conditions, which in turn, impact salmon habitat (e.g., erosion, degraded habitat, sediment deposition).
- *Goal 4 Reduce sources of pollutants,* is under development and calls for collective efforts to decrease sources of pollutants (e.g., from entering consumer markets).

Ongoing Challenges and Opportunities

Through technical workshops, the recent summit, and discussions with South Central LIO partners, member organizations within the South Central LIO are identifying opportunities and barriers to advancing regional stormwater goals. The Stormwater Summit goals have the potential to advance coordinated efforts for addressing stormwater and habitat recovery. Yet, there's still much to do in mainstreaming best practices, reducing barriers, aligning funding sources, and building a coordinated, regional community for stormwater and habitat recovery goals to implement these goals. For example, selecting effective regional stormwater parks (Goal 1) requires working at the watershed scale, and across jurisdictional boundaries, underscoring the importance of designing funding mechanisms (e.g., for land acquisition, capital delivery, etc.) and structures for partner collaboration that enable regional, collective action. Treating roadways with BMPs that remove 6PPD-Q (Goal 2) could have significant capital costs (e.g., up to \$1 billion for 100 miles of roadways); however, effective cross-jurisdiction coordination that includes pairing retrofits with fish passage projects could provide the greatest impact for these projects.

While stormwater management and habitat protection and restoration goals overlap, various aspects of planning, programs, projects, and the utilization of spatial data and communication tools often remain isolated due to regulatory requirements and the structure and administration of grant/funding programs. This fragmentation results in missed opportunities to maximize project impact and achieve "win-win" solutions for both stormwater management and salmon recovery.

We aspire to model an integrated approach after the successful "[Floodplains by Design](#)" framework, creating a similar initiative to support stormwater investment. This approach would aim to foster integrated stormwater management, inspiring and supporting the funding of dynamic, multi-benefit stormwater projects. Establishing an integrated funding program means that entities would not have to piece together funding from disparate places and instead, can generate the political will necessary to garner support for regional coordination of integrated projects. Recognizing that Floodplains by Design is much more than a granting program, we aim to have this initiative act as a community building initiative, encouraging local groups to advance integrated stormwater management and look at community, ecosystem, and water quality from large scale stormwater retrofit projects. As part of this initiative, we would center equity and community, by understanding who is most impacted by stormwater and other stressors, and partner with those communities to co-design solutions and projects. One promising community equity-centered approach is through green jobs training programs and employment opportunities from the [Dirt Corps](#). DIRT Corps is a collaborative organization in the Puget Sound that provides access to green careers, promotes sustainability, and fosters community engagement. They offer hands-on training in areas like rain garden design and ecological restoration, with a focus on increasing opportunities for all, particularly those excluded from the environmental field.

Achieving stormwater and salmon recovery integration requires a collective and comprehensive approach. As part of the May 31st Stormwater Summit, leadership from state and federal agencies, the Puget Sound Salmon Recovery Council, King County, and cities spoke to the opportunities to align actions, research, funding, and policies to better support regional action to achieve the best outcomes for stormwater pollution control most quickly. Examples include:

- Engage in Washington State Department of Transportation's current efforts to prioritize stormwater retrofit investments to better align investments by state, local, and tribal governments. Further develop and apply tools for stormwater retrofit prioritization at a basin scale.
- Support and strengthen incentives for collaborative, multi-benefit stormwater retrofit projects as part of Ecology's current update to the NPDES stormwater permits.
- Look for opportunities for state and federal water quality and climate resilience grant funding (like Cap and Invest Funding and Climate Commitment Act's Natural Climate Solutions Account) to support multi-benefit stormwater parks and green stormwater infrastructure projects that strengthen climate resilience, prioritize investment in communities most impacted by water pollution and that are historically underserved with access to green space and parks.

- Jointly research and develop BMPs for controlling 6PPD-Q; update stormwater manuals and design standards to support application of updated BMPs. Jointly advocate for producers to eliminate 6PPD-Q from tires.
- Update local comprehensive plans and development regulations to better support stormwater parks and other multi-benefit approaches to reducing stormwater pollution, strengthening climate resiliency, restoring salmon habitat, and increasing access to green spaces and parks by historically underserved communities.
- Where possible, broaden criteria for state and local open space funding to support land acquisition for multi-benefit stormwater parks. King County has recently modified allowed uses for lands acquired with [Conservation Futures](#) funding to support green stormwater infrastructure approaches that focus on protecting natural landscapes that retain and infiltrate stormwater.
- Explore and jointly pursue opportunities to streamline contracting for installation and maintenance of Green Stormwater Infrastructure in a way that supports MWB contractors and equitable work force development in this growth area for green jobs.
- Continue to jointly advocate for state and federal legislation focused on keeping toxics out of consumer products.

Our vision is to create projects that draw on the links between stormwater management and ecosystem recovery, and their relationship with climate change (increased runoff due to heavier rain events), transportation (impacts of 6PPD-quinone (6PPD-Q), land use (addressing flow control), impacts on Tribal Treaty rights (reliance on healthy salmon habitat to support salmon recovery; safe harvesting of shellfish) and overburdened communities (who can be disproportionately impacted by stormwater pollution and toxics). This is in-line with the Stormwater Strategic Initiatives Freshwater Quality Implementation Strategies to promote multi-program and cross-jurisdictional planning on a coordinated watershed scale (e.g., [B-IBI strategy](#)), and other aspects of the Action Agenda. By comprehensively addressing stormwater and ecosystem recovery at a basin scale, we can provide a path forward to a more resilient, sustainable, and equitable future.

We ask the ECB for the following:

- Convene a series of focused meetings with representation from the ECB, LIOs, State, Federal, Tribes, NGOs, and local governments to identify funding and policy pathways for integrating stormwater and salmon recovery efforts in-line with a broader suite of community goals. Goals for this meeting series include:
 - Establish jointly understood funding and policy barriers to multi-benefit stormwater projects that integrate stormwater, ecosystem recovery, and community. This includes addressing funding and policy barriers to allow for regional coordination and impact.
 - Identify funding and policy pathways to enable the regional coordination integration necessary to advance multi-benefit stormwater projects. This includes identifying what it would take to establish a multi-benefit funding source, like Floodplains by Design (i.e., host entity, funding, etc.)

- Identify implementation next steps for establishing policy and funding pathways for advancing multi-benefit stormwater projects.
- Promote the outcome focused goals that were agreed upon during the Stormwater Summit series: (1) regional stormwater parks; (2) roadway BMPs for treating 6PPD-Q and more; (3) flow control via green stormwater infrastructure and detention ponds; (4) target sources of pollutants through use of source control measures. Support the following pathways that are needed to achieve these goals:
 - Support amending investment structures to allow flexible funding for multi-benefit stormwater projects and cross-jurisdictional collaboration, drawing from the success of the Floodplains by Design funding program.
 - Strengthen incentives for regional stormwater retrofit projects, including multi-benefit stormwater parks in municipal stormwater permits.
 - Support legislation that promotes policies and funding for integrating stormwater management and salmon recovery efforts.

CONNECTION TO ACTION AGENDA

The Action Agenda emphasizes a multi-benefit approach that will help the recovery community effectively make progress toward multiple goals and desired outcomes. Aligning stormwater management initiatives and salmon recovery efforts will help advance the Action Agenda by elevating projects that effectively influence multiple Vital Signs, resulting in a variety of benefits and efficiencies across Puget Sound. Work in leveraging efforts in stormwater and salmon recovery touches on many Action Agenda strategies including Strategy 10 Stormwater runoff and legacy contamination and Strategy 15 Salmon recovery. This effort connects to the [Stormwater Strategic Initiative](#) via the shared goal to plan at the watershed scale to align water quality planning with habitat connectivity. Linking stormwater and salmon via an integrated approach like Floodplains by Design connects to the [Habitat Strategic Initiative](#)'s Floodplains and Estuaries Implementation Strategy. Furthermore, other LIOs have identified connections between stormwater and habitat, for example the Parks element in Snohomish County's Comprehensive Plan includes language about siting multi-benefit solutions to improve water quality and restoring habitat while adding open space and public access.

ANALYSIS

The South Central LIO held a Deep Dive on this topic to identify opportunities, barriers, and strategies for better integrating salmon recovery and stormwater management planning, projects, and strategies in March 2023. They reviewed the current state of stormwater and salmon recovery— where planning and project development can tend to be siloed - as well as opportunities for integrated design and funding to achieve multiple benefits in ecosystem recovery work, including salmon recovery, access to healthy green space— especially for overburdened communities, sustainable land use practices, and transportation planning. They reviewed example approaches to integrating stormwater and salmon recovery planning and projects as part of “Our Green Duwamish” and stormwater retrofit projects in the Bear Creek Basin, which are basin efforts that address both stormwater and salmon habitat. In addition, several South Central LIO members participated in the Stormwater Summit project (described above) which utilized stormwater and habitat tools to develop goals along with extensive discussion with summit participants. In preparation for the Local Forum, the South Central LIO met with leaders from the Stormwater Strategic Initiative, the Habitat Strategic Initiative, and other LIOs to identify and align shared priorities on this issue.

INDICATE PEER REVIEW STATUS (FOR SCIENCE PANEL)

- Peer Reviewed
- Not-Peer Reviewed
- In Preliminary Review
- Requesting Review
- Not Applicable

ATTACHMENTS:

Attachment 1 – [Agenda](#)

Attachment 2 – [Video](#) overview of regional solutions for polluted stormwater

Attachment 3 – Regional Stormwater Goals [Fact Sheet](#)