Lower Columbia Estuary Partnership

Implementation Strategy
July 1, 2025 – June 30, 2035

Purpose: The 10-Year Implementation Strategy of the Lower Columbia Estuary Partnership (Estuary Partnership) will clearly tie back to issues addressed in the CCMP, including those habitats and species prioritized for protection and or restoration efforts, as well as other areas of focus that are identified in the CCMP including but not limited to water quality, stormwater, environmental education, science, monitoring, and maintaining the Estuary Partnership. The Implementation Strategy will also identify long-term financial sustainability objectives and financial strategies to accomplish the Actions of the CCMP.

The Implementation Strategy serves as a guidance document that addresses the basic requirements for the Habitat Protection and Restoration Strategy with the EPA Program Guidance FY25-FY28 (October 2024) and expands upon those habitat restoration specific activities to include the full suite of CCMP Actions and incorporates the results of the Estuary Partnership's Climate Change Vulnerability Assessment completed in 2016-17 prior to the last Implementation Plan.

The second component of the Strategy is to identify a plan to achieve long-term financial sustainability to implement strategies that support the Actions of the CCMP through diverse resources and partners. This section of the Implementation Strategy will meet the requirements of Financial Strategy as outlined in the EPA Program Guidance FY25-FY28 (October 2024).

Strategy Components:

Estuary Partnership Priority Issues:

- biological integrity
- habitat loss and modification
- impacts from human activity
- conventional pollutants
- toxic contaminants
- institutional constraints
- public awareness and stewardship

The seven priority issues are interrelated. The Estuary Partnership's fundamental goal is to achieve a high level of biological integrity for the lower Columbia River and estuary. That integrity has been degraded by human activity and growth over the last hundred plus years. The degradation is evidenced by habitat loss and modification, conventional pollutants (such as elevated temperature, increased dissolved gas, bacteria, and sediment), and toxic contaminants in fish tissue and sediments. Institutional constraints from multiple jurisdictions and lack of public awareness and stewardship make protection of the river challenging.

Estuary Partnership Goals in this 10-Year Implementation Window:

- Increase habitat and habitat function for multiple species; recover 30% (10,382 acres) of historic extent for priority habitats by 2030, and 40% (22,480 acres) of historic habitat coverage of priority habitats by 2050.
- Develop an inventory of greenhouse gas sequestration potential by habitats across the lower river.
- Reduce or remove contaminants and clean up contaminated sites to improve water quality; work with policy makers to secure long-term funding and support for toxics monitoring in the lower river and larger basin.
- Provide education and engagement activities and provide data and information for a range of audiences; reach 3,000 students each year during 20,000 hours of river and environmental education programming; engage with 250 volunteers annually; and expand learning and engagement by creating community outreach and education plans for at least 50% of Estuary Partnership restoration and stormwater projects.
- Convene and coordinate partners to enhance regional strategies and partnerships and heighten protection of the lower Columbia River, including hosting Science to Policy Summits, Columbia River Estuary Conferences, and participating in a range of local, regional, and national collaborations and conversations.

Habitat Restoration Targets:

Identify relevant habitat types and key species in the study area;

The Estuary Partnership updated its Habitat Restoration Targets in collaboration and consultation with the members of the Science Work Group in 2016. The results of the multiyear effort identified the Priority Habitats within each Hydrogeomorphic Reach (A through H) of the lower Columbia. The goals of the CCMP reflect the goals identified below in the Future Habitat Coverage with Targets table. The methodology is based on the goal of recovering 30% of historic extent for priority habitats as a short term goal, by 2030, and 40% of historic habitat coverage of priority habitats as a longer term goal, by 2050. The targets include the additional aspect of no conversion of other native habitats. We believe these targets will be protective of common species and put us on the trajectory of protecting biological integrity.

The Estuary Partnership completed a historical landcover change analysis in 2013, is in the process of updating that analysis (expected to be complete by October 2025), and consistent with CCMP Goals for Actions 1 and 2, will once again update the landcover dataset in 2035. Additionally, the Estuary Partnership completed a detailed sea level rise analysis and interactive map in 2018. The Estuary Partnership may adjust habitat targets based on our assessment of sea level rise impacts as well as the updated landcover data analysis when it is completed in 2025.

Reach	Priority Habitats			
	1	2	3	4
A	herbaceous tidal wetland	wooded tidal wetland		
B	wooded tidal wetland	herbaceous tidal wetland		
C	wooded tidal wetland	herbaceous tidal wetland		
D	herbaceous tidal wetland	wooded tidal wetland	forested	herbaceous
E	herbaceous	forested	shrub-scrub	herbaceous tidal wetland
F	forested	herbaceous	herbaceous wetland	shrub-scrub
G	forested	herbaceous	herbaceous wetland	
H	wooded wetland			

Table 1. Priority habitats (in order) by Hydrogeomorphic Reach

Reach	Future Habitat Coverage with Targets							
	30% Target				40% Target			
	Priority Habitat	Other Habitat	Total Habitat	% of Historic	Priority Habitat	Other Habitat	Total Habitat	% of Historic
A	3,483	11,825	15,308	82	4,644	11,825	16,469	88
B	10,122	12,032	22,154	83	10,122	12,032	22,154	83
C	7,689	10,806	18,495	59	10,252	10,806	21,058	67
D	5,108	2,097	7,205	43	6,644	2,097	8,741	52
E	4,706	2,700	7,406	45	6,274	2,700	8,974	54
F	17,872	7,976	25,848	42	21,046	7,976	29,022	47
G	9,974	2,991	12,965	40	11,888	2,991	14,879	45
H	1,132	4,301	5,433	81	1,337	4,301	5,638	84
All	60,085	54,728	114,813	54	72,205	54,728	126,933	60

Climate change stressors and impacts on living resources;

The impacts of recurring extreme weather events like hotter drier summers and milder winters are already affecting the Columbia estuary, and they are predicted to have profound impacts in the future. Ecosystems, and the wide range of services they provide to all species, including humans, are threatened in multiple ways by changing precipitation patterns, more extreme storms, sea level rise, warming temperatures, and more.

Major impacts from the changing climate that are observable in the lower Columbia include changes to streamflow and flow timing; precipitation rates, intensity, and timing; higher temperatures; longer, drier summers, and increased flooding with sea level rise and river stages.

The Estuary Partnership will continue to study and implement actions to address the impacts of climate change[1] including;

- Identifying, protecting, and enhancing cold-water refuge areas for salmon survival
- Assessing the impacts of sea level rise and increased riverine flooding on lower Columbia wetlands
- Working with communities and partners to assess, identify, and generate solutions that address vulnerabilities and increase resilience

[1] https://www.estuarypartnership.org/our-work/research/climate-resiliency

- Identifying opportunities to increase the understanding of harmful algal blooms in area waterways and assess actions to address
- Consider restoration techniques such as living shorelines, hyporheic exchange, and nature-based solutions
- Develop an inventory of greenhouse gas sequestration potential by habitats across the lower river.

Key Strategies to Implement the CCMP 2025-2035

The following table identifies how the Estuary Partnership will implement the Actions identified in the CCMP. The table expands upon the Actions of the CCMP and includes; include the proposed action plan timeframe, and where appropriate, key milestones for completion; estimate the range of potential costs of the overall action and identify the possible sources of funding; targets; and performance measures.

Within the CCMP each Action includes statements identifying key activities – they are referred to as the "how" statements, and identification of lead implementors and partners. The Estuary Partnership's role is also identified. In this implementation plan table if the Estuary Partnership is not a lead implementer or reporter, that is noted.

The performance measures are intended to provide quantitative data that the Estuary Partnership can track over the implementation period to assess progress for meeting overall CCMP targets.

Action:	**Proposed action plan timeframe, and where appropriate, key milestones for completion;**	**Estimate the range of potential costs of the overall action and identify the possible sources of funding;**	**Targets, including protection and restoration targets (if applicable):** *Note: All CCMP Targets included.*	**Performance measures- (What the Estuary Partnership will track annually)**
Action 1: Inventory habitat types and attributes in the lower Columbia River and estuary and prioritize those that need protection and conservation; identify habitats and environmentally sensitive lands that should not be altered. Update periodically to reflect emerging science and issues.	1. Habitat maps updated by 2034 2. Map greenhouse gas sequestration potential by 2030. 3. Update Landcover Dataset by October 2025, with update by 2035 4. Refine regional carbon calculators, ongoing	1. Habitat Map data ~ $100,000 to update in 2034. Potential Funding sources - EPA, State of OR, State or WA. 2. Greenhouse gas sequestration potential mapping ~$275,000/year assessment and analysis phase (2024-2027), ~ $100,000 - $250,000 for mapping, ongoing costs not identified. Funded 2024-2026 EPA BIL, future potential funders EPA, States, competitive funding sources. 3. ~$50,000-$100,000/year to update carbon calculators. Not currently funded, potential future funders EPA, competitive funding sources.	1. Update the map of habitats every ten years. 2. Develop a map that estimates greenhouse gas sequestration potential by 2030. 3. Maintain and update criteria and tools to identify priority species and maps of their priority habitats. 4. Update and maintain maps that provide information and tools related to vulnerabilities in the estuary due to recurring extreme weather events, accelerated land loss, and sea level rise.	1. # of staff/contractors' hours spent in assessment and/or analysis of carbon/methane flux. 2. $ spent on assessment and analysis of carbon/methane flux, and source of funds. 3. # of staff/contractor hours spent in habitat assessment. 4. $ spent on habitat assessment. 5. # of reports provided, and to whom, on assessment, analysis, mapping addressed in this action.

ACTION 2: Protect, conserve, restore, and enhance priority habitats, particularly wetlands, on the mainstem and within tributaries of the lower Columbia River and in the estuary.	1. All activities are ongoing. 2. Complete the landcover dataset update in 2025, and in 2035 (Action 1).	1. Project development, collaboration, funding development ~ $100,000 - $250,000 per year. Not currently fully funded. Potential future funding sources - EPA, BPA, competitive funding sources. 2. Individual project site feasibility, assessment, design ~ $200,000 and up. Site specific. Various local, state, and federal competitive funding sources. 3. Individual project site construction and maintenance ~$250,000 and up. Site specific. Various local, state, and federal competitive funding sources.	1. No net loss of native habitats from the 2009 baseline; 2. Recover 30% (10,382 acres) of the historic coverage of priority* native habitats by 2030; and 3. Recover 40% (22,480 acres) of the historic coverage of priority native habitats by 2050. ◦Priority native habitats include; herbaceous tidal wetland, wooded tidal wetland, forested, herbaceous, shrub-scrub. Priority is identified by river reach A through H.	1. # acres of each habitat type restored annually, further identified by location and what entity accomplished. 2. # acres of each habitat type protected or conserved annually, further identified by location and what entity accomplished. 3. Total # acres restored, protected or conserved annually. 4. Cumulative acres restored, protected or conservative reported annually. 5. Total $ annually of restoration, protection or conservation annually, further identified by funding source.
ACTION 3: Monitor status and trends of ecosystem conditions and effectiveness of management actions.	1. Complete annual ecosystem monitoring at 3-5sentinel sites annually. 2. Complete action effectiveness monitoring at all sites in accordance with approved monitoring plans - annually. 3. Expand the use of UAV to make monitoring more efficient and effective as appropriate -.	1.Annual cost to maintain a 4-5 person monitoring team to complete all AEM and EMP monitoring plans, including travel ~$1.5m. Currently funded by BPA and specific project funders for monitoring plan implementation. 2.Annual UAV costs including inventory maintenance, insurance, certifications, maintenance ~ $100,000 to $250,000/year. Currently funded by BPA and project funders.	1. Assess at least 20 additional projects representing a broad geography, restoration method, and type of habitat in the habitat effectiveness monitoring program by 2035. 2. Continue to sample and analyze a full suite of indicators at fixed sentinel locations that represent the estuarine-tidal freshwater gradient through 2035 as part of the ecosystem monitoring program.	1. # of acres monitored annually by EMP. 2. # sites monitored annually by EMP, further identified by location. 3. # acres monitored annually by AEM. 4. # of sites monitored annually by AEM, further identified by location. 5. # and location of sites where UAVs were used for monitoring. 6. # of acres monitored annually using a UAV.
ACTION 4: Establish and maintain Columbia River flows to meet ecological needs of the lower Columbia River and estuary.	Implementation and reporting by other partners.	NA	1. Increase the amount of water dedicated to meeting minimum flows between 1999 and 2035.	NA

ACTION 5: Avoid the introduction and reduce the prevalence of non-native invasive species.	Implementation and reporting by other partners.	NA	1. Update the inventory of invasive species by 2035. 2. Provide programs and technical assistance to encourage the restoration and protection of native species with high cultural value such as wapato, cattail, and lamprey. 3. Make state lists of banned plants and invasive species accessible to a range of issuers and users, e.g. nurseries, etc., and update banned list every five years.	NA
ACTION 6: Manage human-caused changes in river morphology and sediment distribution within the Columbia River channel to protect native and desired species.	Implementation and reporting by other partners.	NA	1. Develop a sediment transport model for the lower river to inform appropriate locations for dredge material placement. 2. Inventory and map in-water structures that affect flow as part of the shoreline inventory every five years.	NA
ACTION 7: Develop floodplain management and shoreland protection programs	1. Update the Estuary Partnership Shoreline Inventory by October 2025, update by 2035. (Assumes coverage with update of Landcover Dataset, Action 1)	1. Included in the costs of Action 2, ~ $100,000 to update in 2034. Potential Funding sources - EPA, State of OR, State or WA.	1. Reduce by 10% armored or structured shoreline by 2030. 2. Reduce by 30% non-water dependent structures in the floodplain and floodway by 2030 3. Map and make publicly available a 200-year floodplain map by 2030. 4. Update the Estuary Partnership shoreline inventory every ten years.	Included in Action 1.

ACTION 8: Reduce and improve the water quality of stormwater runoff and other non-point source pollution	1. Complete stormwater retrofits annually at schools and other public spaces. 2. Install native trees and shrubs with stormwater retrofit projects - ongoing.	1. ~ $100,000 per year for community outreach, project development and proposal development. Currently funded (2024-2026) by CRBRP Stormwater program funds. Future funding sources include EPA, States, local governments, other competitive sources. 2. ~$250,000 and up for individual stormwater retrofit project's. Currently funded by CRBRP Stormwater funds, States, local governments. Expect a similar mix of funding sources in the future. 3. ~$50,000 and up, annually, for native trees and shrubs. Currently funded by project funders.	1. Increase on-site retention by 35% by 2035. 2. Increase regenerative and environmentally sustainable practices on farms, roadway rights-of-way, and forestry lands by 2035. 3. Complete at least 2 stormwater retrofit projects annually, beginning in 2024	1. # of projects completed 2. # of High School parking lot project # of schoolyard-based projects 3. # of sq. ft. of impervious surface treated by green infrastructure 4. # of sq. ft. of green infrastructure built 5. # of sq. ft. of impervious surface removed 6. # of plants planted 7. # of trees planted 8. # of classroom lessons provided # of students engaged 9. # of education and outreach materials created 10. # of people involved in project design meetings/events 11. # of people involved in project construction (depave, etc.) 12. # of native trees and plants installed with stormwater retrofit projects. 13. $ spent annually on stormwater retrofit projects (total), further identified by source of funding.
ACTION 9: Ensure that development is ecologically sensitive, reduces greenhouse gas emissions, and reduces “heat island” effects	1. Complete Action 1, Landcover dataset updates. 2. Maintain habitat restoration and science programs that are current with industry standards and best practices - ongoing. 3. Complete surveys of fish passage barriers - 2025.	1. Costs of landcover dataset updates are in Action 1. 2. Professional development of restoration practitioners ~ $20,000 to $100,000 per year. Partially funded by EPA. Future funding from EPA or other competitive sources. 3. ~$200,000 - $500,000 per year in project development, community outreach, proposal development. 30% is funded by EPA BIL and EPA funds. 4. ~$100,000 for fish passage barrier survey in 2025. Funded by LCFRB.	1.Decrease impervious surface in tracts with high disparity by 5% by 2035. 2. Increase by 10% mass transit, carpooling, walking, and bicycle commuting in the metro area by 2030. 3.Reduce by 30% the ratio of converted land to population growth by 2030. 4. Increase coverage of open space and trees and shrubs in urban areas by 35% by 2035.	1. # hours spent by staff and contractors on project and proposal development.

Action 10: Expand and sustain regional monitoring of toxic and conventional pollutants.	1. Complete annual ecosystem monitoring at 3-5 sites annually. (Action 3) 2. Complete action effectiveness monitoring at all sites in accordance with approved monitoring plans. (Action 3) 3. Complete updates to the monitoring strategy every ten years. 4. Work with regional partners to secure long-term toxics monitoring. 4. Work with the Science Work Group and other collaborators annually to ensure regional dissemination of status and trends.	1. ~$1.2million - $2million annually to support a monitoring team including personnel, travel, and equipment. Currently funded by BPA and project funders. Future funding is expected to remain with BPA and additional competitive funding sources. 2. ~$25,000 - $50,000 annually to host the SWG and disseminate information via web based platforms. Currently funded by BPA and EPA. Future funding is expected to remain with BPA and EPA. 3. ~$250,000 and up depending on scope and scale, to support a long-term toxics monitoring program in the lower Columbia. Currently partially funded by an EPA CRPRP grant ending in 2025. Future funding uncertain.	1. Update the monitoring strategy through a collaborative process by 2035 and every ten years thereafter. 2. Review and update a regional list of priority contaminants targeted for reduction by 2030. 3. Regularly monitor and analyze the full suite of priority contaminants at a minimum of 30 sites by 2030 and report on impact on ecosystem and human health. 4. Identify trends in contaminants and impacts of reduction actions by 2035 to adaptively manage.	1. # of toxics monitoring locations sampled each year. 2. # staff/contractor hours spent in monitoring. 3. List of toxics sampled/tested for in lower river annually.
Action 11: Reduce conventional pollutants.	Implementation and reporting by other partners.	NA	1. Decrease by 50% the number of streams that do not meet water quality standards by 2030. 2. Reduce discharges by 25% from nonpoint sources by 2035. 3. Put in place trading opportunities among dischargers by 2035	NA

Action 12: Clean up, reduce, or eliminate toxic contaminants, particularly contaminants of regional concern.	1. Participate with the States and other regional authorities on marine debris and derelict vessel workgroups, clean up, and removal.	1. ~$25,000 -$50,000 for staff time to collaborate with partners. Currently funded by EPA. Future funding from EPA or other competitive sources. 2. ~$20,000 - $200,000 for community and volunteer events to address marine debris and trash removal.	1. Clean up a minimum of five "hot spots" by 2030. 2. Render hazardous waste sites harmless by 2050. 3. Reduce sales of products containing contaminants (fertilizers, pesticides, personal care products) by 2030. 4. Expand regional pharmaceutical takeback programs with law enforcement and medical providers by 2030. 5. Hold pesticide and fertilizer take back programs in multiple locations annually. 6. Remove marine debris at a minimum of 40 sites by 2035. 7. Remove another 10% of mapped derelict vessels by 2030. 8. Remove chlorine from wastewater treatment and industrial processes by 2040	1. # sites where trash, marine debris, or derelict vessels were removed, annually. 2. # of staff/contractor hours on marine debris or derelict vessel workgroups or clean up actions. 3. $ spent on marine debris or derelict vessel workgroups or clean up actions.

ACTION 13: Provide information about the lower Columbia River and estuary that focuses on water quality, endangered species, habitat loss and restoration, biological diversity, and the effects of recurring extreme weather events on the estuary to a range of users	1. Provide regular reports to the SWG on ecosystem trends and health, at least annually. 2. Provide data, mapping, reports, and other information through accessible websites, easy to use written materials, story maps, and other methods. 3. Produce and circulate an eUpdate and Columbia Connections newsletter, monthly. 4. Increase the percentage of opens for the eUpdate and Newsletter.	○~$120,000 - $200,000 annually to support a full communications team, website, newsletters, eUpdate, partners communications, social media, and other outreach strategies. Currently, it is partially funded by EPA. ○~$5,000 - $10,000 per project to create, implement and manage a communications strategy. Currently funded by EPA and other project funders. Future funding is tied to competitive funding sources for restoration, stormwater, and education programs.	Reports, publications, and information: 1. Issue a state of the estuary report that tracks indicators and reports natural resource trends and Estuary Partnership activities every five years. 2. Publish technical analyses of topics including toxic contaminants by 2027 and every ten years thereafter. 3. Publish the inventory and status of habitat restoration efforts in the region annually. 4. Consistently distribute information to consumers and land users through various means, e.g., media, print materials, websites, workshops. Exchange and sharing of information: 1. Host at least one Science to Policy Summit every two years. 2. Host or co-host a regional scientific workshop or conference at least every three years. 3. Update technical information on website annually.	1. # of subscribers to eUpdate and Columbia Connections newsletter. 2. % of opened eUpdate and Newsletters. 3. % of projects with a communications plan, annually. 4. # people attending Science to Policy Summit and topic, when held. 5. # people attending Columbia River Estuary Conference, topics/speakers, when held.

ACTION 14: Create and implement education and volunteer opportunities for community members of all ages to engage in activities that promote stewardship of the lower Columbia River and estuary	1. Complete annual plans for school-based programming 2. Complete annual plans for volunteer planting and other volunteer events annually. 3. Develop and maintain a suite of science and other environmental education opportunities for lending, access via the web, or other methods, with an annual review of offerings. 4. Support professional development to ensure that Estuary Partnership Environmental Educators are able to interact with and provide materials that represent the current state of the art, reflect best practices, and meet state goals. 5. Support a robust collaborative program that encourages community and partner engagement in project and proposal development.	1. ~ $500,000 -$1.2m for annual planning and implementation - Environmental Education and On-Water Canoe programming. Currently funded by EPA, WA, and other competitive sources. Future funding from EPA, WA, competitive sources. 2. ~ $50,000 - $350,000 for planning, organizing, facilitating volunteer events. Currently funded by States and other competitive sources. Future funding from EPA, States, competitive sources. 3. ~$25,000 - $150,000 to develop and maintain curriculum. Currently funded by competitive sources. Future funding from EPA, WA, competitive sources. 4. ~$20,000 - $100,000 for professional funded. Currently it is only partially funded by EPA and other competitive sources. Future funding from EPA, WA, competitive sources. 5. 3. ~$100,000 - $300,000 per year in project development, community outreach, proposal development. Currently approximately 30% is funded by EPA BIL and EPA funds. Future funding by EPA or other competitive sources.	1. Provide a minimum of 20,000 hours of river and environmental education programs to at least 3,000 students in K-12 grade annually. 2. Organize a minimum of ten volunteer opportunities engaging a minimum of 250 volunteers contributing 750 hours of volunteer time annually. 3. Update curriculum at least once a year. 4. Create community outreach and education plans for at least 50% of restoration projects that identify opportunities for education and public stewardship; include accessibility plan (if appropriate); create listservs, social media, and other opportunities for community learning and engagement.	1. # hours of the following: a) k-12 in classroom science education, further identified by location b) k-12 field trips and service learning, further identified by location and school. 2. # of individual in classroom lessons, annually 3. # of individual students served 4. # of schools served annually 5. # of volunteers who participate annually in programming 6. # of trees and shrubs planted annually by: a) students in classroom activities b) volunteers - adults and youth - in volunteer program activities 7. % of restoration projects with an accompanying education/communications plan 8. # hours spent by staff in professional development 9. # of hours spent in project and proposal development

ACTION 15: Identify and improve public access to the river.	1. Annual website updates for the water trail 2. Continue to install water trail wayfinding signs, complete by October 2027. 3. Complete one swimming area or beach cleanup as part of the volunteer program, each year, beginning in Summer 2025.	1. ~$10,000 for annual website and mapping updates. 2. ~$50,000 - $100,000 to complete the wayfinding project for the water trail. Currently not funded. Future funding from EPA or other competitive source. 3. ~$250,000 - $450,000 for annual on water paddling program including staffing, safety equipment and training, supplies for individual programs, mileage, and partner stipends. Currently funded by competitive sources. Future funding by competitive sources. 4. ~$10,000 - $20,000 for site testing for harvest of culturally important foods. Currently not funded. Future funding by competitive sources.	1. Update the Water Trail website at least annually. 2. Install Water Trail wayfinding signs at locations of interest, campgrounds, and other sites by 2027. 3. Conduct at least one cleanup or maintenance of a Water trail site annually as part of the volunteer program. 4. Conduct at least one cleanup or maintenance of a swimming area along the Willamette, as part of the volunteer program, annually. 5. Conduct at least twenty-five paddles annually with partners and community members. 6. Complete testing at one site used for harvest of culturally important first foods at least annually.	1. # Wayfinding signs on Water Trail installed. 2. # of Water Trail sites maintained or cleaned for volunteer events. 3. # of swimming sites maintained or cleaned for volunteer events 4. # of paddling events 5. # of people engaged in paddling 6. # of Big Canoe program partners, further identified by organization 7. # of sites tested prior to harvest of first foods

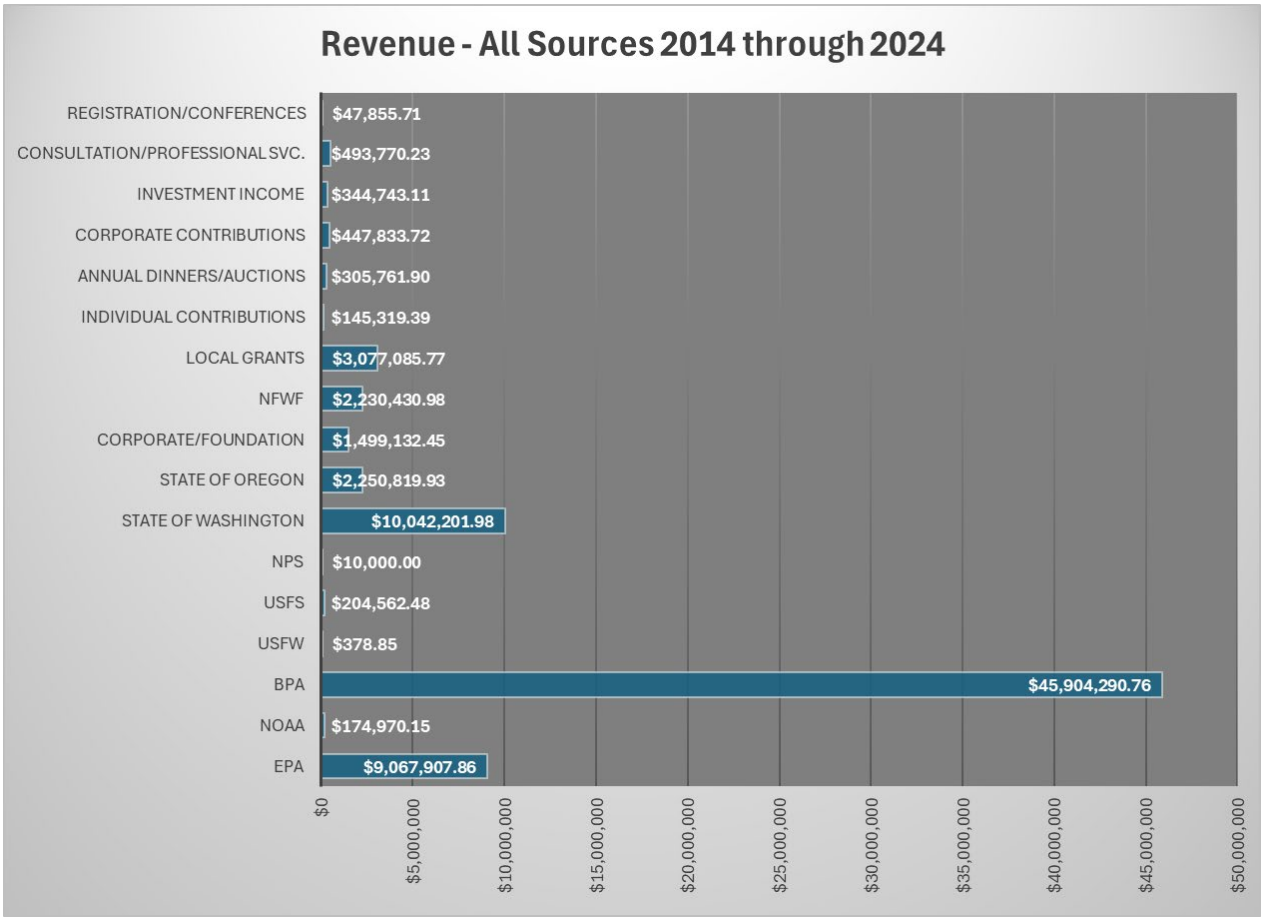
Action 16: Facilitate and assist federal, tribal, state, and local governments protection of the lower Columbia River and estuary.	1. Host and facilitate quarterly Science Work Group 2. Maintain web-based science repository, maps, tools, and resources. 3. Participate in local, state, regional work groups and collaboratives that coordinate with our programming.	1. ~$20,000 annually to support the work of the Science Work Group. Currently funded by EPA and BPA, future funding is expected to remain through those sources. 2. ~$12,000 - $50,000 annually to maintain and update web based repositories. EPA funded, future funding expected to remain with EPA or other competitive sources. 3. ~$150,000 - $250,000 annually for GIS and mapping program. Currently funded by EPA, BPA, and other competitive funding sources. Future funding from mix of competitive funding sources. 4. ~$120,000 annually to support staff participation in workgroups and collaboratives. Currently funded by EPA, BPA and other competitive funding sources. Future funding from mix of competitive funding sources.	1. Implement projects annually in at least five counties that advance habitat restoration or water quality goals of the states and federal government. 2. Provide expertise to a minimum of two other organizations annually concerned with lower river resources such as Vancouver Lake Partnership, Oregon Abandoned and Derelict Vessels Workgroup, Lower Columbia Solutions Group, EPA Columbia River Toxics Reduction Working Group, and others.	1. # of hours and # of meetings of Science Work Group meetings. 2. # of attendees at each Science Work Group meeting and affiliation. 3. List of local, state, regional work groups or collaboratives that staff participate in, further identified by # of meetings, position held (if applicable).

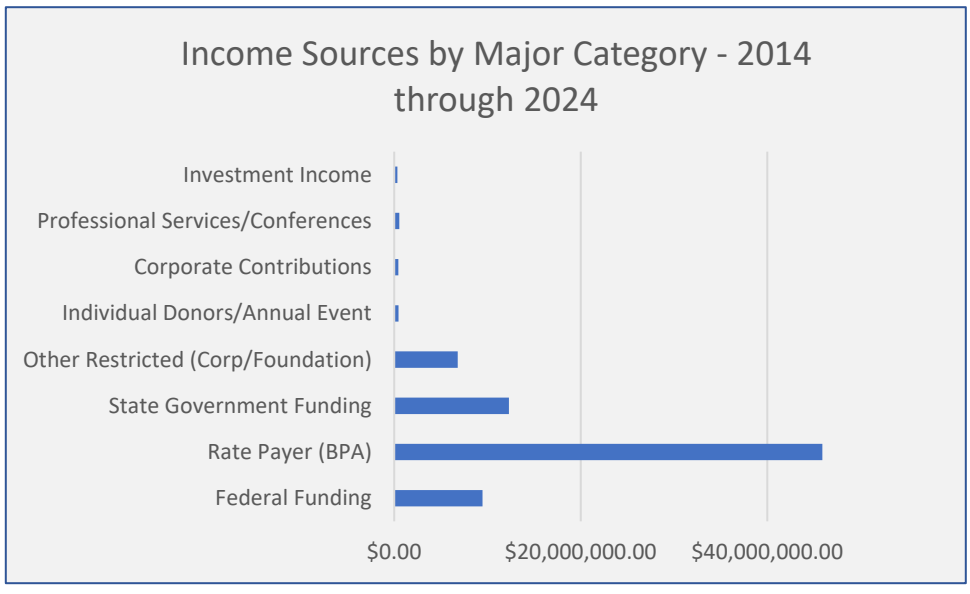
ACTION 17: Create and maintain a regional entity (Lower Columbia Estuary Partnership) to advocate for the lower Columbia River and estuary and unify and coordinate Management Plan implementation.	1. Host quarterly meetings of the Board of Directors, Executive Committee, and other committees of the Board. 2. Complete an annual EPA workplan no later than April of each year. 3. Complete an annual operating budget and staffing plans by April of each year. 4. Host or participate in a range of local, state, regional, and national level collaborative partnerships to meet the goals of the CCMP, the 10-year implementation, and the broader goals of the National Estuary Program. 5. Complete annual performance measurement assessments and reports.	1. ~$1.200,000 - $3,000,000 to fully staff and fund the Estuary Partnership. Currently funded by EPA, the States, and a mix of competitive funds. Anticipate future funding to maintain that mix. 2. ~$10,000 annual performance reporting for EPA and other funders. Currently funded by EPA and other competitive sources, expect this funding mix to continue. 3. ~$100,000 - $250,000 annually to support project and proposal development. Currently only partially funded by EPA. Future funding by EPA and competitive sources.	1. Assess current activity and progress regularly and define a ten-year strategy to implement activities in the Management Plan. 2. Develop a funding strategy to support the implementation strategy. 3. Update the status of implementation strategy activities annually. 4. Maintain or grow state and federal National Estuary Program funding. 5. Maintain diversified funding. 6. The Columbia River Basin Restoration Program is reauthorized regularly. 7. Make annual federal appropriations requests.	1. # proposals written and funded, including total $ value, and purpose of project. 2. # of Board and Committee meetings, # of attendees, # hours for each meeting. 3. Total $ value of program work completed in all areas including habitat restoration, science and monitoring, stewardship, environmental education, stormwater and green infrastructure, on-water programs, water trail, communications and community outreach, general administration. 4. Total $ value of all proposals submitted, awarded, or declined for each program area including habitat restoration, science and monitoring, stewardship, environmental education, stormwater and green infrastructure, on-water programs, water trail, communications and community outreach, general administration and capacity.

Financial Strategy:

Current Funding Serving the Estuary Partnership;

Over the last ten year period, from July 1, 2014, through June 30, 2024 the Estuary Partnership realized over seventy-six million dollars in revenue. That revenue comes from a variety of sources, but predominately from government grants, which provided over sixty-seven million dollars during the same time period – or about 88% of total revenue during the period. Below is the breakdown of funding from all sources:





When funding is broken into major categories, and BPA is considered separately as rate payer-sourced funds, the above chart illustrates the significant differences in funding between categories. It is also important to note that over seventy-four million dollars of revenue was from restricted sources, meaning it was connected to an approved scope of work and budget and did not offer flexibility in how those funds were expended. Those restricted funds accounted for 97.6% of revenue realized during the period. When funds that were realized as payment

for professional services the Estuary Partnership provided and registration for conferences are also removed from consideration – a total of just over one million dollars 1.6% of total revenue over the period was unrestricted.

Additionally, while the CCMP is a requirement of the EPA and a component to the Estuary Partnership's position as a National Estuary Program and all work that the Estuary Partnership accomplishes is in furtherance of our goals within the CCMP, only 11% of the total funding over the ten year period came from the EPA and even less of that EPA funding were Base funds. In practice the EPA Base funding the Estuary Partnership receives from the EPA supports the administrative and operational functions of the organization and little else. This would potentially be one of the few sources of funding that could support project and proposal development if it were more robust, or if there were other sources of funding to support the administrative and operational needs of the organization.

Priorities for Funding;

The Estuary Partnership will prioritize funding for projects that support the implementation of activities that meet the goals of the CCMP. In addition to a guiding interest in working to achieve the goals of the CCMP, the Estuary Partnership will prioritize funding that:

- Provides funding for communications and outreach with communities and partners;
- Provides funding for integrated, cross team collaboration on projects- environmental education components on habitat restoration projects, for example;
- Supports establishment of long-term monitoring in the lower river;
- Provides funding for the administrative and operational costs associated with implementing the work of the Estuary Partnership;

Short- and Long-Term Resource Needs;

- Short Term – Five years or less:
  - Unrestricted revenue to pursue project development and proposal writing
  - New vehicles
  - Funding to support limited duration personnel for seasonal and limited duration projects after BIL sunsets
  - Water trail funding
  - Ongoing replacement of technology – laptops, towers, servers, software, peripherals
  - Funding for professional development
- Long-Term – Five to ten years or longer:
  - Review of personnel policies and benefits to attract and retain a new generation of employees
  - New office space lease that better accommodates parking, storage, security, interior office/structural needs for the team-based workforce
  - Funding to support habitat restoration projects that may be further afield, beyond the boundaries of the study area

Strategies and Timelines to Develop Additional Resources:

Need:	Strategies:	Timeline:	Goals:
Increase Unrestricted Funding	• Work to build giving campaigns • Increase individual giving • Build major donor program • Review and reconsider annual event approach	• Current (2/2025) through mid-2026. • Current (2/2025) through end-2026. • Engage with a major donor consultant. Early 2026. Build campaign and secure first major donor by early 2027.	• Increase campaign revenue by 25% by 2027 and 40% by 2030. • Increase individual giving by 20% by 2027 and 40% by 2030. • Secure major donor by early 2027.

		• Review annual event following 2025 39th anniversary.	• Increase annual event revenue by 30% by 2028.
Diversify State Funding Sources	• Work with state agencies to identify shared mission and identify potential funding sources	• Throughout the 25-27 biennium, work with both states.	• Secure funding through one additional state agency by 2028.
Increase Professional Services Income	• Respond to RFPs for services – Education, restoration, stormwater, other programming	• Current and ongoing	• Secure multi-year contracts for at least two program areas by 2027.
Increase funding for administration and operations	• No longer write proposals for awards that do not allow indirect cost recovery	• Explore the viability of this approach in 2026.	• All funders will support the 15% de minimis rate.
Additional project and proposal development funding	• Increase EPA Base funding to full appropriation • Write proposals for organizational capacity	• Work with delegation and ANEP to accomplish • Identify and apply for organizational capacity grants beginning in 2025.	• Secure full funding by 2026. • Secure organizational capacity funds by mid-2026.

Strategy Implementors and Sources of Funding:

While the Estuary Partnership is driven by the goal of implementing the CCMP, not all of the resource development work that has to happen to ensure the long-term sustainability of the organization can be sustained by EPA Base funding. To accomplish the work that needs to be undertaken to diversify funding and secure organizational sustainability, the Executive Director and the Communications & Development Manager will work in partnership with other staff and consultants.