

PCD STRATEGIC PLAN

2016 - 2020



Pierce Conservation District

Contents

Summary	4
MISSION	5
METHODS.....	5
VISION	5
Pierce Conservation District Scope:	6
Harvest Pierce County Scope:	6
Habitat Scope:.....	6
Environmental Education Scope:	6
Water Quality and Quantity Scope:	6
Farm Planning & Agricultural Assistance Scope:	6
THEORY OF CHANGE DIAGRAMS	7
ECOSYSTEM VALUES	7
DISTRICT GOALS.....	8
Healthy Salmon Runs	8
Clean Water	8
Functioning Native Habitat	8
Sustainable Agriculture	8
Equitable & Healthy Food System.....	8
Inspired & Educated Youth	9
Human Wellbeing	9
PRESSURES.....	10
Table 1.....	10

Table 2.....	11
STRATEGIES AND ACTIONS	14
1. Equitable and Healthy Food System, Engaged Community and Human Wellbeing	14
1. Strategy: Build a Community Based Food System	14
2. Strategy: Develop Public/Private Support Systems	15
3. Strategy: Develop Economic Entrepreneurship	15
4. Strategy: Integrate Equity	16
5. Strategy: Sustaining the Community Based Food System	16
6. Strategy: Build Strong Communities.....	16
7. Strategy: Deliver educational resources for the community.....	17
8. Strategy: Educate Policymakers.....	18
2. Inspired & Educated Youth	18
1. Strategy: Increase Access for Children	18
2. Strategy: Support Environmental Education Programs	18
3. Strategy: Build Community Engagement (+)	19
3. Healthy Salmon Runs, Clean Water, Functioning Native Habitat, Sustainable Agriculture, and Human Wellbeing	19
Soil & Agricultural Land Protection (+).....	19
1. Strategy: Agricultural Protection	19
2. Strategy: Build Community Engagement (+)	20
Fish Passage Barriers.....	20
3. Strategy: Improve Fish Passages & Remove Barriers for Fish Migration (+)	20
Marine Shoreline Habitat (+)	21
4. Strategy: Incentivize green shoreline implementation.....	21

Polluted Water Generated by Runoff	21
5. Strategy: Promote Green Stormwater Infrastructure.....	21
6. Strategy: Identify and Prioritize Project Areas.....	22
7. Strategy: Educate Landowners	22
8. Strategy: Improve Regulatory Environment.....	23
9. Strategy: Promote Agricultural Best Management Practices (BMPs)	23
10. Strategy: Build Community Engagement (+)	23
Restoration.....	24
11. Strategy: Invasive Species Control.....	24
12. Strategy: Collaborate on Restoration Projects.....	24
13. Strategy: Implement Native Plantings.....	24
14. Strategy: In-Lieu Fee Program.....	25
15. Strategy: Build Community Engagement (+)	25
Climate Change	25
16. Strategy: Increase Climate Resiliency	25
17. Strategy: Energy Conservation (+)	25
18. Strategy: Green Infrastructure.....	26
19. Strategy: Forest Resilience (+)	26
20. Strategy: Build Community Engagement (+)	26
4. Excellence in Action	26
1. Strategy: Organizational Culture	26
2. Strategy: Organizational Financial Stability	27
3. Strategy: Internal Organizational Equity	27
4. Strategy: Partnership Development	27

5. Strategy: Build Community Engagement (+)	28
6. Strategy: Implement a Comprehensive Communications Plan (+)	28
RESULTS CHAINS WITH STRATEGY EFFECTIVENESS INDICATORS.....	29
APPENDIX I. Theory of Change Diagrams.....	30
APPENDIX II. Status Indicators for our Ecosystem Values	33
Table 3.....	38
CLEAN WATER	40

Summary

This document provides a detailed explanation of the Pierce Conservation District’s 2016 – 2020 strategic plan. Within this document you will find our Mission and Vision Statements, long-term organizational goals, five year targets for incrementally achieving those goals, strategies for achieving those targets, and indicators for how we measure the success of our strategies. This document is the summation of a rigorous, multi-

year planning process undertaken by the staff and Board of Supervisors of Pierce Conservation District and will be henceforth adaptively managed to accommodate the ever changing conditions and challenges of Pierce County.

MISSION

Pierce Conservation District works throughout Pierce County with local landowners, citizen volunteers, and public agencies to conserve natural resources that are essential to both our economy and our region's quality of life.

METHODS

The heart of our mission is our collaborative efforts with voluntary local landowners and citizen volunteers to improve water quality, promote sustainable agriculture, create thriving habitat, and build an equitable and healthy food system for all through education, community engagement, and assistance. Our commitment to improving the well-being of Pierce County residents and ecosystems is reflected in all of our work.

VISION

Everyone in Pierce County is engaged in creating a healthy environment and thriving community.

Pierce Conservation District Scope:

The high priority areas for habitat and water quality improvement and natural resource protection, within the four main watersheds of Pierce County as defined by District partner jurisdictions, regional Salmon Recovery Lead Entities, Local Integrating Organizations, and other partner agencies and organizations. Nearly everything the District does is in partnership and support of others' goals and priorities. Every project is identified as a priority by our partners and guided through stakeholder feedback and direction or is an implementation of a project already identified in an approved natural resource improvement plan. Priorities will be further defined by program.

Harvest Pierce County Scope:

The communities of focus are underserved, high need communities. This currently includes South and East Tacoma, Orting, and Parkland-Midland and may expand to other communities in the future. The program also selects areas based on existing grassroots movements, support, partnerships, and requests for programs.

Habitat Scope:

The riparian habitats of Pierce County, focused by high priority salmon streams, state, county, and city-led efforts to improve water quality on impaired streams, and priority habitats identified by partners and the feasibility for successful restoration.

Environmental Education Scope:

Focused on all school-age youth in Pierce County with an emphasis on upper elementary students, connecting with formal educators, and providing both school based and field trip education opportunities.

Water Quality and Quantity Scope:

This work is focused on Raise the Grade objectives, Total Maximum Daily Load restrictions, Green Stormwater Infrastructure opportunities, and jurisdictional/partner needs.

Farm Planning & Agricultural Assistance Scope:

This work is focused on Pierce County's recreational and commercial shellfish growing areas, high priority salmon streams, Raise the Grade objectives, and lands adjacent to a water body with a Total Maximum Daily Load restriction. This program is also focused on delivering support programs to the agricultural growing areas and livestock farming communities.

THEORY OF CHANGE DIAGRAMS

See Appendix 1

ECOSYSTEM VALUES

(Note: Status indicators are captured in Appendix 2)

- Healthy Salmon Runs
- Clean Water
- Functioning Native Habitat
- Sustainable Agriculture
- Equitable and Healthy Food System
- Inspired & Educated Youth
- Engaged Community
- Human Wellbeing

DISTRICT GOALS

Healthy Salmon Runs

By 2040, Pierce County will have the conditions necessary to support self-sustaining wild salmon and Steelhead populations in barrier free watersheds.

Clean Water

By 2040, Pierce County's intertidal waters support harvestable shellfish beds, communities have swimmable beaches and marine shorelines, and local streams support healthy salmon runs.

Functioning Native Habitat

By 2040, degraded riparian habitats in Pierce County will be restored and will support healthy populations of salmon, wildlife, and native plant communities.

Sustainable Agriculture

By 2040, Pierce County will have a sustainable agricultural economy that protects natural resources and soil health, supports both large and small farm operations, and provides greater local access to fresh and healthy food.

Equitable & Healthy Food System

By 2040, everyone in Pierce County has equal access to healthy food and a voice in defining how our food system operates. The food system advances social justice as well as good physical and community health, and food is produced in a way that is socially and environmentally sustainable.

Inspired & Educated Youth

By 2040, our environmental education work will have provided educational, outdoor, and hands-on experiences to create conservation awareness in Pierce County youth in order to develop the next generation of environmental stewards and leaders.

Human Wellbeing

By 2040, residents of Pierce County are actively involved in conserving the local environment and creating an equitable and healthy food system, enhancing the human wellbeing of all who live and work in the region.

Excellence in Action

Pierce Conservation District will employ the best people, policies, and practices to achieve our work.

PRESSURES

Table 1

The complete list of the 23 pressures affecting Pierce Conservation District ecological and social components. Language source: The Puget Sound Partnership Pressures Taxonomy (bold font captures the categories with the pressures listed below each category).

<p><u>1. Residential & Commercial Development</u></p> <p>Housing & Urban Areas (1.1)</p> <p>Commercial & Industrial Areas (1.2)</p> <p><u>2. Agriculture & Aquaculture</u></p> <p>Wood Plantations</p> <p><u>3. Energy Production & Mining</u></p> <p>Quarrying</p>	<p><u>5. Biological Resource Use</u></p> <p>Logging & Wood Harvesting (5.3)</p> <p><u>6. Human Intrusions & Disturbance</u></p> <p>Recreational Activities (6.1)</p> <p><u>7. Natural System Modifications</u></p> <p>Abstraction of surface water (7.2.1)</p> <p>Abstraction of ground water (7.2.2)</p> <p>Dams (7.2.3)</p>	<p><u>8. Pollution</u></p> <p>Domestic and Commercial Wastewater to Onsite Sewage Systems (OSS)(9.1.1.2)</p> <p>Runoff from residential, commercial and industrial lands (9.1.2 and 9.2.4)</p> <p>Agricultural & Forestry Effluents (9.3)</p> <p><u>9. Added by PCD</u></p> <p>Invasive species</p> <p>Climate change</p> <p>Industrial food system</p>
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<p><u>4. Transportation & Service Corridors</u></p> <p>Culverts (4.1)</p> <p>Utility & Service Lines (4.2)</p> <p>Dredged Waterways (4.3)</p>	<p>Freshwater Levees, Floodgates, Tidegates (7.2.4)</p> <p>Freshwater and marine shoreline infrastructure (7.3 and 7.4)</p>	<p>Farm policy (Farm Bill, subsidies)</p> <p>Disengaged community</p> <p>Lack of equity</p>
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Table 2.

List of the top 11 pressures affecting Pierce Conservation District ecological and social components.

Top Pressure	Definition
Housing & Urban Areas	Cities, towns, and settlements including non-housing development typically integrated with housing. This class dovetails with Commercial and Industrial Areas. As a general rule, however, if people live in the development, it should fall into this source class. Examples: urban areas, suburbs, villages, ranchettes, vacation homes, offices, schools, hospitals, land reclamation or expanding human habitation that causes habitat conversion.
Commercial & Industrial Areas	Factories and other commercial centers. Shipyards and airports fall into this class. Examples: military bases, factories, stand-alone shopping centers, office parks, power plants, train and ship yards, ports, airports, & landfills.

Fish Passage Barriers	Blocked, perched, undersized, or otherwise failing culverts that obstruct or prevent up- and downstream passage of fish (salmonids) at all life stages. Also, working to prevent and remove other impairments to fish migration (e.g. rock and debris jams built to create swimming holes, dams determined to be obsolete or an endangerment to fish).
Freshwater and marine shoreline infrastructure	Armoring of freshwater shorelines and overwater structures that alter, destroy, and disturb habitats and species via a nonconsumptive use, including industrial, commercial, and recreational marinas. Armoring of marine shorelines and overwater structures that alter, destroy, and disturb habitats and species via a nonconsumptive use, including industrial, commercial, and recreational marinas, ports and shipyards. Pierce Conservation District focus is on hard armoring, private docks, bulkheads, etc.
Runoff from residential, commercial and industrial lands	Introduction of exotic or excess material into hydrologic system due to surface water loading and runoff from the built environment This class includes runoff from commercial and residential lands, industrial facilities and lands, transportation facilities and corridors, as well as hull-cleaning and other pollution from marina infrastructure and land-based boat maintenance practices (i.e. NPDES regulated activities that occur in marinas and shipyards).
Agricultural & Forestry Effluents	Water-borne pollutants from agricultural, silvicultural, and aquaculture systems that include nutrients, toxic chemicals and/or sediments including the effects of these pollutants on the site where they are applied. This class also includes pollutants added by biosolids, herbicide, and pesticide application. Examples: nutrient loading from fertilizer run-off, manure from feedlots, nutrients from aquaculture; soil erosion from overgrazing, increased run-off and hence sedimentation due to conversion of forests to agricultural lands; herbicide run-off from orchards.
Invasive species	Plant and animal species not originally found in local native habitats that cause and/or create degraded ecological function.
Climate change	Change in climate patterns resulting from increased atmospheric greenhouse gases and/or events outside the natural range of variation. Includes changes in ocean acidity, temperature, hydrological regimes and weather events.
Industrial food	Industrial agriculture is a modern form of capital & fossil fuel intensive farming has led to the commodification of food.

system	Though it is abundantly produced - due to commodification - food is both wasted and inequitably distributed. As a result, the community is no longer engaged in their food system.
Disengaged community	A community that does not understand or value the pressures facing natural resource degradation or food insecurity or is not motivated to change behavior to mitigate the negative effects due to other factors in their life such as not understanding how it effects their life or being overwhelmed with more pressing issues.
Lack of equity	Existing systems and structures reinforce racial and other inequities, resulting in a society where there are different levels of access to resources for different groups of people.

STRATEGIES AND ACTIONS

+ denotes the need for new or additional resources to make an impact in this area. New resources could come in the form of new rate authority or grant/contract revenues.

Summary of Strategies by Goals

Strategies are listed under the goals they primarily achieve. They are further organized by categories of strategies under the goals. Goals are associated with the individual components, including: Healthy Salmon Runs, Clean Water, Functioning Native Habitat, Sustainable Agriculture, Just and Healthy Food System, Engaged Community, and Human Wellbeing

Note: Supporting strategies (i.e. funding, communication/community engagement, partnerships, and research/assessments) are mostly included within the strategies below. The supporting strategies should be further developed and may be included as actions when relevant to support individual strategies, as standalone/overarching strategies, or as both.

1. EQUITABLE AND HEALTHY FOOD SYSTEM, ENGAGED COMMUNITY AND HUMAN WELLBEING

1. **Strategy: Build a Community Based Food System**

Together with a diversity of partners – Build a Community based food system by facilitating new projects and systems to integrate those projects into the broader network by supporting new community food projects

- A. Action:** Develop templates to support a greater diversity of community food projects based on community garden work (i.e. food forest, fruit tree harvesting hub, veggie coop)
- B. Action:** Promote opportunities to diverse communities
- C. Action:** Act as a clearinghouse for community groups—connect them with appropriate partners when it goes beyond our capacity

- D. Action:** Conduct research to further develop clearinghouse capabilities (i.e. youth, economic development, free meeting locations, commercial kitchens, lending libraries, physical resources, etc.)
- E. Action:** Facilitate the development of Community Food Projects during their development through meeting facilitation, resource coordination and other support as needed.
- F. Action:** Develop pilot projects as needed to test new models of Community Food Projects
- G. Action:** Maintain and evolve infrastructure in place to support gleaning activities (glean web, support for harvest coordinators, etc.)
- H. Action:** Actively seek partnerships and collaborations with organizations and individuals interested in developing a just and healthy food system to expand the network of people engaged in this work

2. Strategy: Develop Public/Private Support Systems

Develop systems to support public and private organizations' participation and engagement in the creation of Community Food Projects

- A. Action:** Develop MOU with Tacoma Public Schools to facilitate the development of a greater diversity of school and youth programs
- B. Action:** Work with Pierce County to develop systems for encouraging Community Food Projects on County property
- C. Action:** Develop procedures to assist smaller municipalities and other large landowners in supporting Community Food Projects as needed
- D. Action –** Pro-actively assess gaps in the food system and institutions that could play an active role; work to develop systems to support and engage these institutions

3. Strategy: Develop Economic Entrepreneurship

Develop systems to support economic entrepreneurship in Community Food Projects

- A. Action:** Identify partners with skills and resources in business development
- B. Action:** Build partnerships with other organizations to support entrepreneurship in the food system
- C. Action:** Clarify our role in the development of these types of activities in the community

4. Strategy: Integrate Equity

Integrate equity into the way we work and support the development of community food projects in order to create a more just food system for all by engaging and working with a greater diversity of communities on a greater diversity of community food projects

- A. Action:** Develop strategies to target diverse communities for outreach and volunteer recruitment
- B. Action:** Develop & pilot different community engagement models, (i.e. learning work parties, “barn raising” model, etc.)
- C. Action:** Conduct outreach to diverse and underserved communities
- D. Action:** Continue to cultivate partnerships with organizations currently engaged in serving diverse populations

5. Strategy: Sustaining the Community Based Food System

Support people to develop leadership abilities and become competent in the skills necessary to successfully manage a community food project in collaboration with neighbors (i.e. transparent decision making processes, conflict resolution, shared leadership, inclusive processes, non-violent communication)

- A. Action:** Develop trainings and resources to support people in community project management (on the above-mentioned topics)
- B. Action:** Host 2 new workshops per year on topics related to leadership and project management
- C. Action:** Define for the community what a Community Food Project is in terms of goals and processes, and what resources are available to each type of project
- D. Action:** Develop systems to manage volunteers internally
- E. Action:** Develop procedures to provide resources to Community Food Project leaders about effective volunteer management
- F. Action:** Further develop system to cultivate leaders and sustain work through internship opportunities, etc.
- G. Action:** Sustain existing networks
- H. Action:** Evolve existing networks based on community feedback
- I. Action:** Conduct site visits with project members and/or landowners (farmers) on an annual basis to maintain relationships with project leaders and hear directly from people about challenges and successes

6. Strategy: Build Strong Communities

Strong communities are the result of healthy relationships among community members and between community members and institutions. We work to engage diverse communities in reciprocal and responsive relationships so that we are able to listen to community voices and develop programming that is reflective of community needs and interests.

- A. Action:** Develop supporting systems to encourage a sense of community among volunteers
- B. Action:** Engage in ongoing conversations with diverse communities throughout Pierce County so that programming is responsive and continually evolves to meet community needs and interests
- C. Action:** Plan and execute Annual Volunteer recruiting event
- D. Action:** Host annual event to recruit new people, re-connect former volunteers, and launch summer harvest season.
- E. Action:** Host spring event to educate the community (on a broader range of topics than we typically offer), showcase our diverse programming, demonstrate our values & vision, celebrate the work happening
- F. Action:** Host fall event to celebrate the year's work and to thank volunteers and partners
- G. Action:** Host event to ensure food production is accessible to all, and to celebrate the beginning of the season
- H. Action:** Host (or coordinate with partners in hosting) event to promote community leaders, celebrate the work of community gardens, raise awareness of community food projects and their diverse audiences
- I. Action:** Host as needed community events to celebrate, engage the community, and raise awareness of food system issues
- J. Action:** Support communities to develop an understanding of the connections between the food system and human and ecological health

7. Strategy: Deliver educational resources for the community

Assess community demand for educational resources and evaluate appropriate role for HPC and other partners

- A. Action:** Assess community demand for educational resources
- B. Action:** Provide relevant educational opportunities based on community interest and need
- C. Action:** Teach workshops for partner organizations by request if capacity exists
- D. Action:** Develop tool for assessing whether new educational programming should be developed internally or through partner agencies
- E. Action:** Develop partnership with other food project education programs when internal capacity does not exist for expansion of offerings
- F. Action:** Develop new educational programming when appropriate

8. Strategy: Educate Policymakers

Educate policymakers and share best practices on strategies to develop a just and healthy food system

- A. Action:** Develop a clear procedure for how and when Harvest Pierce County should engage in advocacy.
- B. Action:** Work with Steering committee & Board of Supervisors to develop guidelines for the development of this procedure
- C. Action:** Determine most important external structures to develop and adjust for accountability on equity
- D. Action:** Implement external structures, policies and practices with inclusive decision-making and other forms of power sharing
- E. Action:** Leverage our work with communities of interest for their ability to address power structures and inequalities as they exist within, and impact agricultural food systems in this region
- F. Action:** Explore producing communication pieces in multi-lingual materials

2. INSPIRED & EDUCATED YOUTH

1. Strategy: Increase Access for Children

Increase opportunities for school-aged children to access nature and local food (+)

- A. Action:** Build more raingardens and community gardens in schools to create hands-on learning opportunities about stormwater and food access
- B. Action:** Take school-aged children outside for field trips and day experiences and increase K-16 volunteer programs related to the natural environment to expose more children to the outdoors as a classroom
- C. Action:** Participate in school field days, field trips, and in-class lessons
- D. Action:** Inventory funding and opportunities for environmental education through other agencies, organizations, and partners.

2. Strategy: Support Environmental Education Programs

Support and implement environmental education programs in Pierce County to increase appreciation for local natural resources/nature and local food in order to achieve long-term behavior change (+)

- A. Action:** Involve students in meaningful, hands-on programs, lessons and activities that improve their knowledge of water quality, the water cycle, native plants, fish and wildlife habitat, salmon life cycles, local food, climate change, and soil health

- B. Action:** Develop environmental education programming that incorporate and align with curriculum objectives and relevant learning standards
- C. Action:** Work with Environmental Education partners to establish the District's niche, share resources, and collaborate on initiatives that support Environmental Educators
- D. Action:** Participate in signature community events to deliver our natural resource improvement messages
- E. Action:** Identify resources to develop District owned Inglin and Bee Spit Honey properties into public education venues

3. Strategy: Build Community Engagement (+)

Build greater community engagement through school based programs and public education.

- A. Action:** Work to provide experiential opportunities for youth to directly engage in environmental efforts
- B. Action:** Partner with existing environmental education providers for the purpose of planning and executing opportunities in order to strategically build more faceted and connected learning experiences.
- C. Action:** Encourage our audiences to explore their watersheds and identify their place and role in being a steward of our local natural resources.
- D. Action:** Develop educational opportunities that will address real-world, and most pressing issues

3. HEALTHY SALMON RUNS, CLEAN WATER, FUNCTIONING NATIVE HABITAT, SUSTAINABLE AGRICULTURE, AND HUMAN WELLBEING

Soil & Agricultural Land Protection (+)

1. Strategy: Agricultural Protection

Pierce Conservation District supports organizations that are leading on land protection as a convener, temporary landowner and by providing financial and logistical support

- A. Action:** Support partners such as Futurewise, Agriculture Community of Interest, Forterra, PCC Farmland Trust and Cascade Harvest Coalition and others part of the Farmland Conservation Committee of the Agricultural Roundtable in achieving agricultural land protection via conservation easements
- B. Action:** Work with partners to stand-up a Farm Link Program in Pierce County to connect farmers with available farmland
- C. Action:** Provide infrastructure support for agricultural businesses to minimize conversion pressure, reduce costs to farm businesses and keep farm businesses profitable
- D. Action:** Work with partners to increase local markets for local farm products in order to keep farm businesses viable
- E. Action:** Analyze the feasibility of a Community Forestry Program as a strategy to protecting the industrial forestlands in the Puyallup Watershed and support Nisqually Land Trust work as needed

2. Strategy: Build Community Engagement (+)

Build greater community engagement through volunteer programs, work parties, and farmowner assistance programs

- A. Action:** Structure work parties and volunteer programs to build connections between people and the environment
- B. Action:** Consider partners through the existing community of interests in the Puyallup Watershed Initiative and each of the four watershed councils for the purpose of promoting farmowner assistance programs, such as cost share assistance, soil sampling, site visits, and farm planning
- C. Action:** Develop educational opportunities that will address real-world, and most pressing issues

Fish Passage Barriers

3. Strategy: Improve Fish Passages & Remove Barriers for Fish Migration (+)

Replace priority failing culverts in the four main watersheds of Pierce County in coordination with lead entities

- A. Action:** Update and revise the original culvert survey and inventory
- B. Action:** Evaluate failing culverts, miles of habitat to open, and a cost-benefit analysis
- C. Action:** Prioritize culverts for replacement
- D. Action:** Identify funding sources for culvert replacement
- E. Action:** Implement replacement plan and associated riparian restoration

Marine Shoreline Habitat (+)

4. **Strategy: Incentivize green shoreline implementation**

- A. **Action:** Inventory/Map/Track the addition or removal of Pierce County hardened shorelines to identify priority areas for green shorelines
- B. **Action:** Assemble a green shorelines team
- C. **Action:** Explore incentive options, including financial, technical support, and regulatory/permitting incentives
- D. **Action:** Retrofit existing hardening in priority areas
- E. **Action:** Facilitate non-traditional bank armoring by collaborating with local officials including Planning and Land Services, Washington Department of Fish and Wildlife, Army Corps of Engineers
- F. **Action:** Host public and homeowner workshops
- G. **Action:** Develop a shoreline de-armoring education and outreach campaign

Polluted Water Generated by Runoff

5. **Strategy: Promote Green Stormwater Infrastructure**

Promote and implement Green Stormwater Infrastructure (GSI) throughout Pierce County, which will reduce pollutants from water as it infiltrates into the ground

- A. **Action:** Promote and implement Green Stormwater Infrastructure (e.g.: rain gardens, pavement removal), which will increase water infiltration that will in turn reduce runoff
- B. **Action:** Encourage and install plantings along water bodies to filter pollutants from water as it flows through their roots, hold stream banks together, and provide shade that will cool the water
- C. **Action:** Encourage and install tree planting to intercept and absorb water as it grows, especially in urban and suburban areas
- D. **Action:** Promote GSI retrofits of old development and GSI standards for new development by creating and managing a GSI Revolving Loan Program for GSI improvements

- E. **Action:** Promote residential rain barrels and cisterns. Use educational workshops as an opportunity to deliver other messages on water quality and water quantity

6. **Strategy: Identify and Prioritize Project Areas**

Identify water quality issues and problem areas and prioritize project areas for further action.

- A. **Action:** Monitor water quality and use other professional water quality data to identify problem areas
- B. **Action:** Coordinate citizen stream monitors to educate the community on water quality issues that will increase citizens being advocates for stream health and make better lifestyle choices to improve water quality. Use as an opportunity to bring volunteers into current programs
- C. **Action:** Participate in groundwater modeling efforts to understand direction and transport of pollutants in our watersheds
- D. **Action:** Monitor water flow and use other professional water quality data to identify problem areas and improve District programs and focus areas
- E. **Action:** Monitor water quality in order to target implementation sites, increase long-term landowner engagement, and increase community engagement
- F. **Action:** Target stormwater implementation projects to impact 303d and TMDL listed streams
- G. **Action:** Design watershed-scale monitoring programs and monitor for watershed health to determine if improvements are occurring at the landscape scale

7. **Strategy: Educate Landowners**

Educate Agricultural & Rural Landowners and implement practices to reduce runoff.

- A. **Action:** In targeted watersheds, farms that may have polluted runoff from poor management practices would be identified by aerial photography and/or windshield surveys. The landowners of these farms would be the subject of a targeted outreach program to provide education and assistance to correct the problem. The outreach program would consist of the following: mail correspondence, drop-in farm visits, leaving educational materials if the landowner is not home, and educational workshops in the targeted watershed.
- B. **Action:** Prioritize findings from survey and outreach program to determine implementation strategy
- C. **Action:** Implement practices with private landowners to reduce pollutants and erosion on farm and rural lands

- D. Action:** Determine the need of providing agricultural support services to row-crop farmers to reduce soil erosion and pollutant runoff

8. Strategy: Improve Regulatory Environment

Improve awareness of the implications of zoning laws as it relates to livestock density and water quality.

- A. Action:** Educate landowners and policy makers of the impacts of livestock density and agricultural zoning to achieve a healthier ratio of livestock density in order to protect natural resources.
- B. Action:** Assist Pierce County to understand the best practices related to reducing livestock density as a means to improve water quality.
- C. Action:** Leverage the partnerships through the Agricultural Community of Interest to land-use laws as it relates to livestock density and water quality improvement.

9. Strategy: Promote Agricultural Best Management Practices (BMPs)

Promote, participate in, and lead programs that benefit agricultural best management practices and protection of open space.

- A. Action:** Participate in and co-produce projects with multiple benefits in mind and that have watershed-scale impacts
- B. Action:** Promote the open space agriculture and rural farm surface water program, with Best Management Practices
- C. Action:** Support land trusts in the protection of working lands through convening, stakeholder support, funding and coordination
- D. Action:** Create new outlets for manure to keep farming viable and to protect surface water. Examples include expansion of the district's manure share program, and exploration of ways to turn excess manure from farms into a more valuable product

10. Strategy: Build Community Engagement (+)

Build greater community engagement through volunteer programs, work parties, and farm owner assistance programs

- A. Action:** Structure work parties and volunteer programs to build connections between people and the environment
- B. Action:** Consider partners through the existing community of interests in the Puyallup Watershed Initiative and each of the four watershed councils for the purpose of promoting farm owner assistance programs, such as cost share assistance, soil sampling, site visits, and farm planning
- C. Action:** Develop educational opportunities that will address real-world, and most pressing issues

Restoration

11. Strategy: Invasive Species Control

Control existing invasive species and the introduction and spread of additional invasive species.

- A. Action:** Research and determine priority watersheds for invasive species control, with input from partners and other stakeholders
- B. Action:** Lead targeted control of invasive species in priority watersheds (e.g. the knotweed model)
- C. Action:** Implement appropriate monitoring for invasive species removal and planting success
- D. Action:** Develop appropriate tracking system to effectively monitor and communicate success of the invasive species control work over time and to set future targets
- E. Action:** Education to limit the introduction and spread of additional invasive species (start with research on what education is already happening and direct action accordingly)
- F. Action:** Make attempts to work with landowners and jurisdictions regarding proper maintenance to ensure long-term viability of restoration projects

12. Strategy: Collaborate on Restoration Projects

Provide leadership, collaboration, and support for agencies and partners on restoration projects

- A. Action:** Work with Pierce County and other regulatory agencies to implement habitat Best Management Practices on priority streams
- B. Action:** Become a larger funding partner for projects through the Green Partnership Fund for priority restoration projects (+)
- C. Action:** Support an Urban Forester position for all of Pierce County and especially its smaller cities in order to improve tree health and tree canopy coverage (+)

13. Strategy: Implement Native Plantings

Implement restoration in priority areas and increase native plantings, particularly in riparian areas

- A. Action:** Identify priority areas for restoration, including priority habitats to focus on
- B. Action:** Increase capacity of in-house crew for site preparation, farm Best Management Practices, plantings, KW/invasive removal, and planting maintenance (+)

- C. **Action:** Promote native plant sale and planting by individuals through workshops and training sessions

14. Strategy: In-Lieu Fee Program

Assist with implementation of the Pierce County In-Lieu Fee Wetland Mitigation Banking Program to support the creation of large-scale functioning wetlands.

- A. **Action:** Serve as third-party conservation easement holder for Pierce County Surface Water Management and possibly other sponsors of in-lieu fee projects in Pierce County

15. Strategy: Build Community Engagement (+)

Build greater community engagement through volunteer programs and work parties

- A. **Action:** Structure work parties and volunteer programs to build connections between people and the environment
- B. **Action:** Work with project partners to leverage volunteer participation and share opportunities for community engagement
- C. **Action:** Incorporate environmental education and learning opportunities into habitat restoration projects

Climate Change

16. Strategy: Increase Climate Resiliency

Increase the climate resiliency of agricultural lands and native habitats through existing programs

- A. **Action:** Develop an irrigation efficiencies program to support producers through drier, longer summers (+)
- B. **Action:** Monitor and adapt planting times, plans, and species to accommodate for changes in precipitation to increase the likelihood of survival of habitat plantings
- C. **Action:** Acquire or perform hydrological modeling to inform water resource planning

17. Strategy: Energy Conservation (+)

Develop an energy conservation program to reduce greenhouse gases from the agricultural sector.

- A. **Action:** Assess the feasibility of hiring a Resource Conservation Manager for the purpose of creating climate action plans and implementing energy conservation projects specific to agricultural producers and rural landowners

18. Strategy: Green Infrastructure

Develop green infrastructure projects that improve climate resilience and adaptation.

- A. Action:** Plan and implement more green infrastructure projects with higher intensity rain events and drier springs and summers in mind
- B. Action:** Improve tree canopy cover in urban areas to protect against the heat-island effect

19. Strategy: Forest Resilience (+)

Prepare small family forests for drought and warmer, fire-risk temperatures.

- A. Action:** Develop an FireWise Program to support small family forest landowners in preparing for fire danger
- B. Action:** Implement FireWise projects as identified through the outreach and education process

20. Strategy: Build Community Engagement (+)

Build greater community engagement through volunteer programs and work parties

- A. Action:** Structure work parties and volunteer programs to build connections between people and the environment
- B. Action:** Consider partners through the existing community of interests in the Puyallup Watershed Initiative and each of the four watershed councils for the purpose of promoting farm owner assistance programs, such as cost share assistance, soil sampling, site visits, and farm planning
- C. Action:** Develop educational opportunities that will address real-world, and most pressing issues

4. Excellence in Action

1. Strategy: Organizational Culture

Build Pierce Conservation District as a best place to work through people, policies and internal culture.

- A. Action:** Attract, retain and inspire exceptional staff with competitive salaries, benefits and a rewarding, team-oriented and inspiring work environment
- B. Action:** Ensure our team has the tools and resources to implement their work including a functioning facility to house all of our programs and operations

- C. **Action:** Be a model of environmental sustainability
- D. **Action:** Be known as a fun, rewarding and engaging place to work
- E. **Action:** Ensure staff has the opportunity to build new skills and develop professionally
- F. **Action:** Be known as a trusted, effective partner in resource conservation and local food access work in the region and nationally

2. Strategy: Organizational Financial Stability

Build the organization's long-term financial strength and ensure accountability of public resources

- A. **Action:** Access the full rate capacity of the District to fund programs and implementation of the strategic plan
- B. **Action:** Ensure clean audits from State Auditor each year
- C. **Action:** Secure tier one good governance status with the State Conservation Commission each year
- D. **Action:** Analyze the feasibility of creating a foundation to support the work of the District
- E. **Action:** Work to leverage District resources by at least 90% with grant, contract and fee-for-service revenues

3. Strategy: Internal Organizational Equity

Build an internal culture of equity into the Pierce Conservation District organization

- A. **Action:** Develop an internal understanding and analysis of racism, sexism, socio-economic status, homophobia and other factors as a barrier to effective diversity and inclusion
- B. **Action:** Develop an intentional identity for PCD as an anti-racism institution
- C. **Action:** Develop a culture that integrates equity principles in to our day-to-day work
- D. **Action:** Develop internal structures for accountability to anti-racist learning

4. Strategy: Partnership Development

Build strong partnerships and new resources to build the capacity of our program, communicate our effectiveness and improve trust in the work we do

- A. **Action:** Engage in meaningful dialogue and outreach with our partners about our work and continue to develop deeper relationships to position PCD as a highly trusted partner in resource conservation

- B. Action:** Engage volunteers, interns and community members in the execution of our work where appropriate to leverage our staff's capacity and expertise, constantly recruiting new and diverse audiences to sustain our volunteer needs
- C. Action:** Consider developing an Advisory Committee made up of key partners and partner jurisdiction representatives to stay engaged in our work and advise on future trends and needs of our partners
- D. Action:** Communicate the effectiveness of our work to our partners and ratepayers
- E. Action:** Design monitoring and communication programs to articulate District's successes, challenges and role in the natural resource system
- F. Action:** Work to continue momentum on projects developed as part of PWI communities of interest

5. Strategy: Build Community Engagement (+)

Build greater community engagement through volunteer programs, work parties, educational workshops, and District ambassadors

- A. Action:** Structure work parties and volunteer programs to build connections between people and the environment
- B. Action:** Leverage partnerships for the purpose of planning and scheduling volunteer opportunities in order to build more faceted and connected learning experiences
- C. Action:** Develop educational opportunities that will address real-world and most pressing issues
- D. Action:** Leverage partnerships such as Lead Integrating Organizations (LIOs) to develop watershed or region wide approaches to conservation work, providing greater opportunity for community involvement
- E. Action:** Where applicable, develop District volunteer committees, stewards, and ambassadors as a method of communications, evangelism, and project management to increase our staff capacity

6. Strategy: Implement a Comprehensive Communications Plan (+)

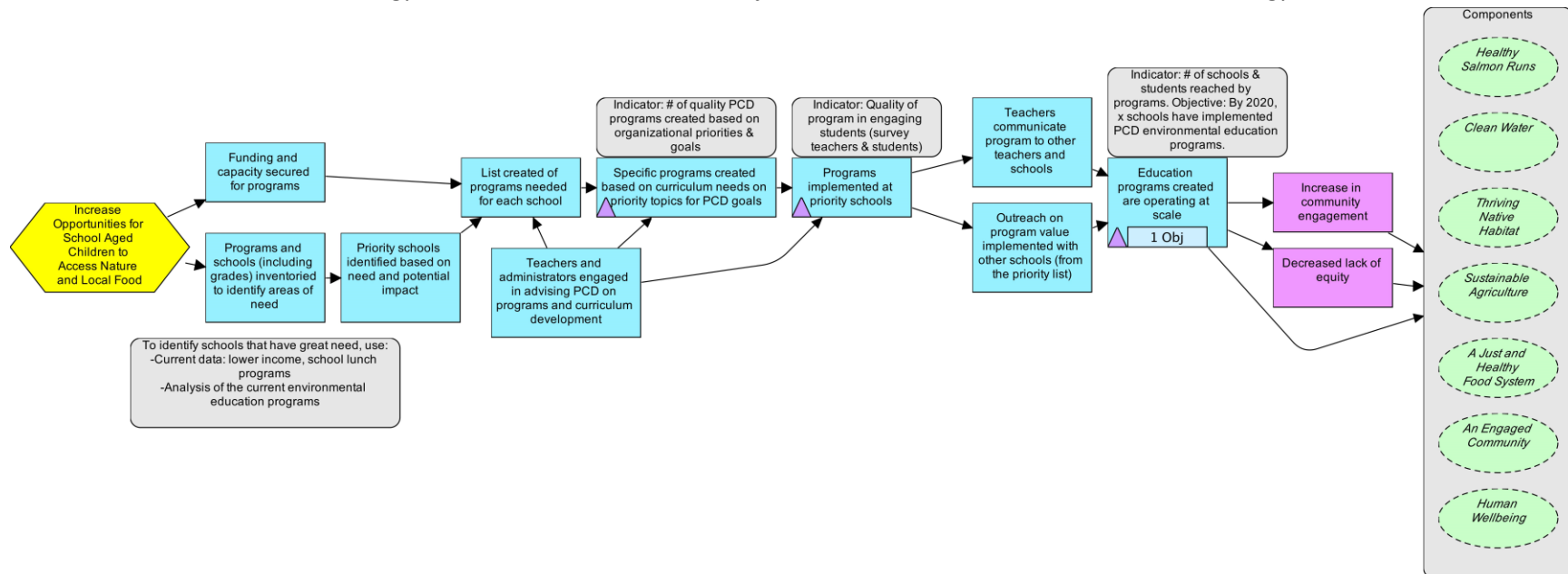
Build greater support for each and every program through strategic communications enhancing both internal and external communications enabling greater efficiencies and more powerful connections with our publics

- A. Action:** Inventory current communication methods, channels, and platforms
- B. Action:** Eliminate unnecessary communication channels and platforms
- C. Action:** Align and integrate remaining communication methods, channels, and platforms to work together and feature the PierceCD.org website as our primary external communication tool

- D. Action:** Boost the Search Engine Optimization of PierceCD.org through content development and integrated use of all other communication channels
- E. Action:** Develop communication campaigns around specific projects that will help boost Pierce Conservation District's visibility
- F. Action:** Leverage partner networks to boost visibility of our projects and effective partnerships
- G. Action:** Align staff across programs to develop mutually beneficial projects that create greater internal communications and boost efficiencies in our overall work

RESULTS CHAINS WITH STRATEGY EFFECTIVENESS INDICATORS

Most are to be developed (in progress). Note: Strategy effectiveness indicators and objectives are also captured in Appendix III. There is one results chain with associated strategy effectiveness indicators and objectives for the environmental education strategy:



APPENDIX I. Theory of Change Diagrams.

PCD Theory of Change Diagrams by Program:

Agricultural Assistance & Farm Planning Program. Pierce Conservation District provides education, technical and financial assistance to local agricultural producers and private landowners in a non-regulatory way, **so that**
(Outcome) There is a change in behavior related better land management practices on private lands, **so that**
(Outcome) The agricultural industry is economically viable and sustainable in the District service area, **so that**
(Goal) Natural resources such as soil, water and wildlife are protected and improved in the priority watersheds, **and**
(Outcome) Food is produced and processed locally, **so that**
(Outcome) Local food is available and accessible to communities, **so that**
(Outcome) The farmland stays working and not converted to non-farm uses so that local jobs are created, soil is protected and water and wildlife is protected, **so that**
(Goal) There is an increase in sustainably farmed lands and high quality soils protected.

Urban Agriculture & Local Food Access Program. Pierce Conservation District engages the community to deepen their connection to each other and their food system, and inspires and supports them to work together to develop community food projects **so that**
(Outcome) There is a connection between people and how food is grown, **so that**
(Outcome) people have a better appreciation for natural resources such as soil, food and water, **so that**
(Goal) Natural resources such as soil, water and food are protected and improved throughout Pierce County, **and**
(Outcome) Food is produced locally and all people have greater access to and awareness of healthy food **so that**
(Outcome) All communities, including communities of color, low-income and disadvantaged communities have access to fresh, healthy and local food and the skills to grow and procure this food, **so that**
(Goal) Pierce County has a Just and healthy food system
(Outcome) Communities build relationships with each other and deepen their ability to work together, **so that**
(Outcome) There is an increase in the number of people engaged in a just and healthy food system.

(Goal) Communities are more resilient and healthy,

Habitat Improvement Program: Pierce Conservation District provides education, volunteer opportunities, and technical and resource assistance to public and private landowners, **so that**

High quality, functioning, and diverse habitats native to Pierce County are conserved, enhanced, or restored, **so that**

(Goal) Natural resources such as soil, water, fish and wildlife are protected and improved throughout Pierce County, **and**

(Outcome) Riparian areas in particular are being restored, **so that**

(Outcome) Our streams are cooler, cleaner and healthier, **so that**

(Outcome) Fish and wildlife have functioning habitats to thrive, **and**

(Outcome) There is a connection between people and native habitats, **so that**

(Outcome) People have a better appreciation for natural resources such fish, wildlife, and plants, **so that**

(Goal) Pierce County habitats will support native wildlife and plant communities for future generations, **and**

(Outcome) Native species will avoid extinction, and in some cases recover from threats of extinction.

Environmental Education Program: Pierce Conservation District provides meaningful, hands-on activities, programs and lessons focused on grades K-16, **so that**

(Outcome) Youth can learn about natural systems in a fun and inspiring way, **so that**

(Outcome) A positive connection is established between youth and the environment, **so that**

(Outcome) Youth get engaged at an early age to protect and improve natural resources, **and**

(Outcome) Take their learnings home to their parents, friends, and family, **so that**

(Goal) Youth grow up to be good stewards of the natural environment, **and**

(Outcome) Citizens become more engaged in efforts to protect the environment, **so that**

(Outcome) The natural resource problems we see today are not repeated due to better understanding and engagement, **so that**

(Outcome) The region's quality of life and residents' well-being is improved over the long term, **so that**

(Goal) Everyone grows up engaged in creating a healthy environment and thriving community, **and**

(Goal) The health of Puget Sound, its watersheds, and inhabitants is no longer degraded by human activity.

Water Quality Program: Pierce Conservation District provides water quality and quantity education, technical support, and financial assistance to public and private property owners in a non-regulatory way, **so that**

(Outcome) Individuals are more educated, **and**

(Outcome) Community understands water quality conditions and is engaged in actions for improvement, **so that**

(Goal) There is a change in behavior related to better land and water management practices on public and private lands, **so that**

(Outcome) Polluted water into streams, lakes and Puget Sound is lessened, **so that**

(Outcome) Water quality is protected and improved, our streams and lakes are swimmable and shellfish may be consumed, **and**

(Goal) Salmon runs are healthy and human wellbeing is improved.

APPENDIX II. Status Indicators for our Ecosystem Values

Healthy Salmon Runs:

- **Indicator:** # of Natural Origin Spawners (PSP)
- **Indicator:** # of Natural Origin Recruits (PSP)
- **Indicator:** % Historic Miles Available to Adult Chinook (PSP)
- **Note on Targets:** Pierce Conservation District's Healthy Salmon Runs strategies are based on improving the conditions necessary for healthy salmon populations, therefore our targets are aimed at those conditions
 - **Target:** By 2021, the District will have completed the fish passage barrier inventory for all watersheds and implemented 2 fish barrier removal projects
 - **Target:** By 2021, District programs will plant 35,000 trees and shrubs, 50-acres, and 4 stream miles
 - **Target:** By 2021, District projects will contribute to 750,000 gallons of stormwater naturally infiltrated annually
 - **Target:** By 2021, District will have engaged 6,000 community members in water quality programming
 - **Target:** By 2021, 150 BMPs installed

Clean Water:

- **Indicator:** Raise the Grade (RTG) program (Pierce County)
 - **Target:** By 2021, RTG increase by ½ increment on Pierce County Surface Water Management focus streams the District partners on (e.g. B- raised to B)
- **Indicator:** Total Maximum Daily Load (TMDL) list (Department of Ecology)
 - **Target:** By 2021, each TMDL has a developed response plan
- **Indicator:** # gallons of stormwater cleaned annually through infiltration (PCD)
 - **Target:** By 2021, new District projects will contribute to 750,000 gallons of stormwater infiltrated annually
- **Indicator:** # of days of caution, warning, or closure status due to toxic algae on PCD monitored lakes (TPCHD)

- **Target:** By 2021, the District will lead a comprehensive outreach effort to homeowners within 1 of the 5 District monitored lakes to improve lake health
- **Indicator:** # of total shellfish acres open to commercial and recreational harvest (WA DOH)
 - **Target:** By 2021, an additional 120 acres of shellfish area open to harvesting compared to WA DOH total acres open for shellfish harvest at the end of 2015
- **Indicator:** Community members engaged in water quality improvement and monitoring programs (PCD)
 - **Target:** By 2021, the District will have engaged 6,000 community members in water quality programming
- **Indicator:** # Best Management Practices (BMP) installed (PCD)
 - **Target:** By 2021, 150 BMPs installed

Functioning Native Habitats:

- **Indicator:** Number of riparian restoration projects (PCD)
 - **Target:** By 2021, District programs will plant 35,000 trees and shrubs, 50-acres, and 4 stream miles
- **Indicator:** Area of riparian habitat treated for invasive species (PCD)
 - **Target:** By 2021, in the Nisqually River and South Prairie Creek project areas, we will have treated a total of 430 acres and 20 stream miles for Japanese Knotweed to maintenance levels
- **Indicator:** Amount of Armored Shorelines, in miles (PSP/DOE)
 - **Target:** PCD will have a program in place to provide education and outreach, and technical and/or financial assistance to landowners interested in pursuing green marine shoreline projects in the KGI watershed and will implement one pilot project

Sustainable Agriculture:

- **Indicator:** # of acres participating in permanent land conservation programs
 - **Target:** By 2021, 3,000 acres of additional agriculture lands permanently conserved
- **Indicator:** Total people employed by agriculture
 - **Target:** By 2021, agricultural employment of Pierce County will increase by 2% from 2013 Employment Security Department Agricultural Workforce Report

- **Indicator:** Total value of farm products
 - **Target:** By 2021, the total market value of agricultural products sold will increase by 5%
- **Indicator:** Total number of farms in Pierce County
 - **Target:** By 2021, Pierce County will have no net loss in the number of farms from 2012 Census data

Equitable & Healthy Food System:

- **Indicator:** % of residents who feel heard and respected in government decision making processes (PSP HWB indicator)
 - **Target:** By 2021, the creation of and integration of a forum within the Community of Interest to amplify the voices of the community in a food system related decision making forum
- **Indicator:** Number of Pierce County residents living in a census track within ½ mile of a community garden (TPCHD)
 - **Target:** By 2021, the number of residents living in a census within a ½ mile of a community garden will increase by 20%
- **Indicator:** The effects of the lack of healthy food are not felt by any one group of people (TPCHD tracks)
 - **Target:** By 2021, participation in food-system related community leader groups will be more diverse (more people of color/more diverse languages), matching the Tacoma/Pierce County Census demographics
- **Indicator:** # of residents who are participating in the community-based food system (PCD)
 - **Target:** By 2021, participation in the HPC programming increases by 30%
- **Indicator:** # of projects (community gardens, orchards, food forests, gleaning hubs, etc.,) throughout Pierce County (PCD)
 - **Target:** By 2021, we will have 100 Community Food Projects throughout Pierce County

Engaged Community:

- **Indicator:** # of District volunteers annually
 - **Target:** By 2021, the number of volunteers across all District programs will increase by 30%
- **Indicator:** # of K-12 youth engaged in District environmental education programs
 - **Target:** By 2021, K-12 youth engagement in the District's environmental education programs will increase by 30%
- **Indicator:** # of K-16 youth engaged in District programs

- **Target:** By 2021, K-16 youth engagement across all District programs will increase by 30%
- **Indicator:** # of annual volunteer hours
 - **Target:** By 2021, annual volunteer hours across all District programs will increase by 30%
- **Indicator:** # of people attending District workshops
 - **Target:** By 2021, the number of workshop attendees across all District programs will increase by 15%
- **Indicator:** # of visitors to our website
 - **Target:** By 2021, District website traffic will increase by 200%
- **Indicator:** # of followers on the District's social media
 - **Target:** By 2021, the District's social media audience will increase by 200%
- **Indicator:** # of subscribers to monthly email list
 - **Target:** By 2021, the # of subscribers to the District's monthly email list will increase by 100%

Inspired & Educated Youth:

- **Indicator:** # of K-16 youth reached through education programs in schools, science clubs, after school programs, etc.
 - **Target:** By 2021, the District will reach an additional 4,000 K-16 youth through our diverse education programs
- **Indicator:** # of student contact hours
 - **Target:** By 2021, the District will establish a watershed based program in each of the four Pierce County watersheds, featuring classroom lessons and field experiences with a minimum of two schools in each watershed participating.
- **Indicator:** Youth focused programs across District departments
 - **Target:** By 2021, each of the District departments will have at least one K-16 focused program

Human Wellbeing:

- **Indicator:** Sense of place: % of residents who express a sense of stewardship for the natural environment.
 - **Target:** By 2021, increase the percentage of Pierce County residents who express a sense of stewardship for the natural environment by 2%

- **Indicator:** Stewardship: Number of residents involved in stewardship activities.
 - **Target:** By 2021, increase the number of Pierce County residents involved in District run stewardship activities by 20%
- **Indicator:** # of households within a half mile of a community garden
 - **Target:** By 2021, increase the number of households within a half mile of a community garden by 5%

Excellence in Action:

- **Indicator:** Utilize Rate Capacity
 - **Target:** By 2017, the District will collect 55% of its Rates capacity
 - **Target:** By 2021, the District will collect 75% of its Rates capacity
- **Indicator:** Demonstrate District Financial Accountability
 - **Target:** Every year the District will receive a clean audit (no significant findings) from the office of the Washington State Auditor
- **Indicator:** Demonstrate District Operational Accountability
 - **Target:** Every year the District will receive a Tier 1 Good Governance rating from the Washington State Conservation Commission
- **Indicator:** Secure External Funding
 - **Target:** By 2017 (and every year thereafter) the District will leverage External Funding (contracts, grants, donations) /Rates Funding at 90% level
- **Indicator:** Staff retention
 - **Target:** The District will retain at least 90% of staff each year
- **Indicator:** Bi-annual staff survey
 - **Target:** By 2021, 90% of District staff is rating the District as a great place to work and would recommend it as a great place to work for others (bi-annual staff survey)
- **Indicator:** Number of racial and cultural competency trainings attended by PCD staff
 - **Target:** By 2021, 75% of District staff has attended racial and cultural competency trainings
- **Indicator:** PCD outreach and community engagement strategies reflect the diversity of the community we serve
 - **Target:** Outreach materials are translated into top languages spoken (other than English)

Table 3.
Summary of Status Indicators by Ecosystem Value

Healthy Salmon Runs

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Healthy Salmon Runs	# of natural origin spawners	SOS2012_VS08_110812leslie.pdf WSC_Letter_to_Commissioners_FINAL.pdf Watershed Assessment - Lorin Reinelt_201312111026029553.pdf	Puget Sound Partnership reports bi-annually	<p>Puget Sound Partnership provides a chart that indicates the amount of natural-origin Chinook spawners in the Puget Sound for 22 populations, and how the population has significantly changed for Chinook salmon (see hyperlink Figure1).</p> <p>Puget Sound Partnership stated that only 22 of the 37 historic Chinook populations remain (up to 78,000 in Puyallup watersheds)</p> <p>Today's diversity losses is mostly accumulated from the early run of December, January, and February, used to average 55% to 95% of the total winter run, now steelhead is about 25%, and the large spawning population of resident steelhead</p>	2010 – 2014 averages: # of plants installed – 4,283 acres planted – 2.5 stream miles planted – 3,030 linear feet

				accounted for up to 40% of the male spawners in some Pierce County waters	
Healthy Salmon Runs	# of natural origin recruits	http://www.psp.wa.gov/downloads/SOS2012/sos2012_110812pdfs/SOS2012_VS08_110812.pdf	<p>The Puget Sound Partnership reports the number of natural origin recruits.</p> <p>Trends for Chinook recruits were calculated for 5 and 10 year periods</p>	<p>Measure: urban trees, depave sites, rain gardens, farm structure gutters</p> <p>Measure: volunteer programs; farm program recommendations; manure spreader users; farm, soil sampling, and water quality site visits; workshops; classroom presentations; stream monitors; lake monitors</p> <p>Measures: depending on the BMP measurement will be as #, acres, or sq. ft.</p>	N/A
Healthy Salmon Runs	% historic miles available to adult Chinook (PSP)	2013-2014-Annual-Report.pdf 2008_Nisqually_Watershed_Update.pdf	<p>The Puyallup/White River Watershed provides over 1,300 linear river miles</p> <p>More than 26 miles of the Upper Puyallup River Basin is the mainstem habitat for Chinook, steelhead, bull trout, and other salmon</p>	<p>Implementation of the Nisqually Chinook Recovery Plan—hopes to increase the mainstem protected habitat from 70% to 75%</p> <p>The District is aware that our work often has a more significant impact on other salmonid species. As part of the adaptive management of this plan, District staff will work with other agencies to identify data sources for recovery of historic river miles</p>	N/A

				for other salmonid species.	
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CLEAN WATER

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Clean Water	Raise the Grade Program (PC)	https://www.co.pierce.wa.us/index.aspx?NID=2867 https://www.co.pierce.wa.us/ArchiveCenter/ViewFile/Item/2612	<p>The Surface Water Management division tracks and reports the water quality in an annual Surface Water Report Card.</p> <p>The Surface Water Management Division monitors more than 50 lakes and streams in Pierce County.</p> <p>Monitoring streams and watershed using a letter grade based on factors Pierce County monitors water quality monthly at many sites</p> <p>The SWM collects data using the WQI, from summer sampling of the water, how many beach</p>	Pierce County chooses the streams they will work on annually and of those, the District only partners on a select number. Because of this, the District will need to monitor this work through annual work plans and annual reports rather than simple 5-year targets.	2015 Pierce County Surface Water Management focus streams (2014 Grades): Clear – D Swan – C- Minter – C- Mark Dickson – C- Ray Nash – D+

			<p>closures, sampling benthic macro-invertebrates, and Washington State's 303(d) list of impaired water bodies to create a letter grade for that stream or body of water.</p> <p>Pierce County measures water quality monthly at many sites also, which is a different report card with 44 streams and 8 lakes</p>		
Clean Water	Total Maximum Daily Load list (DOE)	http://www.ecy.wa.gov/programs/eap/fwintro.htm http://www.epa.gov/region10/pdf/tmdl/mst_for_tmdls_guide_04_22_11.pdf	<p>The Department of Ecology relies on the Quality Assurance to monitor the scientific research</p> <p>The Department of Ecology has different occasions on measuring water: <u>Rivers & Streams</u>: continuous research (monthly) and long term research (5 year rotation)</p>	TMDL's relies on identifying and characterizing correctly the source of the pollutant sources causing the impairment to the clean water.	N/A

			<p><u>Lakes</u>: monitored annually</p> <p>Surrogate measures—to provide pollution reduction targets (post-implementation verification to verify surrogate measure results</p> <p>Microbial Source Tracking--uses DNA & RNA to figure out the human or animal that left bacteria that contributes to polluted water.</p>		
Clean Water	Gallons of storm water cleaned annually through natural infiltration	Measure numbers of: urban trees planted, depave sites, rain gardens, farm structure gutters	District Staff annual measurements	<p>Every year, an estimated 26,600 gallons of stormwater fall on a single house, with an estimated 4.5 million houses in the Puget Sound Region</p> <p>Pierce County is barely reaching a C for a clean water grade because of stormwater runoff</p>	N/A
Clean Water	Community members engaged in water quality improvement and monitoring programs	PCD Annual Report	District Staff annual measurements	Measure: volunteer programs, farm program recommendations, manure spreader users, farm, soil sampling, and water quality site visits, workshops, classroom presentations, stream monitors,	2014: 1,378

				lake monitors	
Clean Water	# days of caution or warning for lakes status due to toxic algae on PCD monitored lakes	Tacoma-Pierce County Health Department _ Current Surface Water Advisories.html	<p>Tacoma-Pierce County Health Department updates current surface water advisories weekly until advisory is lifted</p> <p>Last update of Tacoma-Pierce County Lakes with toxic algae: 8 (Last updated: July 30 2015)—none of the advisories have been lifted</p>	WQ program staff would work with Lakewood City staff, TPCHD, and others to stand up one outreach program. Message is to reduce nutrient enrichment of the lake through natural yard care, rain garden installation, pet waste control, maintenance of or re-establishment of natural shoreline vegetation. Based on added capacity of program.	<p>2015: # caution/warning days*</p> <p>American: 119</p> <p>Steilacoom: 89+</p> <p>Wauhop: 365</p> <p>Louise: 8</p> <p>Gravelly: 0</p> <p>Carp: 0</p> <p>Surprise: 0</p> <p>*5yr Target is unrelated to benchmark</p>
Clean Water	# of total shellfish acres open to commercial and recreational harvest	http://www.psp.wa.gov/shellfish.php AA-draft-120911-c9.pdf Commercial Shellfish Map.html	Tacoma Pierce County Department of Health - Change in Harvestable Acres of Shellfish Growing Area by Year	<p>The Puget Sound Partnership created the Action Agenda, which is the blueprint to restore and protect Puget Sound—its goal is a net increase of 10,800 harvestable shellfish acres by 2020</p> <p>Puget Sound Partnership measured that about 36,000 acres of shellfish beds (about 19%) are closed due to pollution in Puget Sound</p>	Total Pierce County Shellfish Growing Acreage, 2015: 8,756

Clean Water	# of Best Management Practices Installed	PCD Annual Report	District Staff measures annually	Measures: depending on the BMP measurement will be as #, acres, or square feet	N/A
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FUNCTIONING NATIVE HABITATS

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Functioning Native Habitats	Number of riparian habitat restoration projects	District Annual Report	District Staff will track		2010 – 2014 averages: # of plants installed – 4,283 acres planted – 2.5 stream miles planted – 3,030 linear feet
Functioning Native Habitats	Acres of invasive plant treated	Frequently Asked Questions.html Deborah Ringler, Pierce County Weed Board	Orders that were filled out to come get rid of noxious weeds: 1,404 (does not reflect the actual miles of each order) Parcels that contained and were cleared of noxious weeds: 14,491	Approx. 420,000 acres of grasslands and forests have been degraded by noxious weeds Suggestion: Change acres to parcels and ROW's by infestation	430 acres and 20 stream miles treated within the Nisqually River and South Prairie Creek project areas

Functioning Native Habitats	Amount of Armored Shorelines, in miles	http://wdfw.wa.gov/grants/ps_marine_nearshore/files/parcel_segmentation.pdf Shoreline Management _ Home _ Washington State Department of Ecology.html	<p>Puget Sound Partnership reports that there are 2,500 miles of shoreline in the Puget Sound—more than 25% of that shoreline is armored</p> <p>Based on Puget Sound Shoreline Parcel Segmentation Report, approximately 57% of the length of the Puget Sound shore is privately owned and armored</p> <p>Department of Ecology State of Washington measures 28,000 miles of shorelines</p>	<p>PSP, DOE, and others currently track this throughout Puget Sound. There are numbers out there on the amount of new armoring added and the amount of armoring removed each year – e.g. PALS issues permits for new bulkhead construction, retrofits, and/or removals. PALS’ permits do not differentiate between shoreline modifications on marine or freshwater, so using county permits to track shoreline armoring would require deciphering the location for where permits are issued.</p>	N/A

SUSTAINABLE AGRICULTURE

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Sustainable Agriculture	# of acres participating in permanent land conservation	PCD shared server data	Farmland Conservation Committee’s GIS analysis	PCD suggests: having one server where multiple districts can input information that can be shared and accessed with each other	N/A

Pierce Conservation District
Strategic Planning Content to Date
November 5, 2015

	programs				
Sustainable Agriculture	Total people employed by agriculture	https://fortress.wa.gov/esd/employmentdata/docs/industry-reports/agricultural-workforce-report-2013.pdf	2013 Agricultural Workforce Report Employment Security Department		2013 – 1,190
Sustainable Agriculture	Total market value of agricultural products sold	Agriculture Census	<p>Value of agricultural production in Washington is approx. \$9.5 billion, over 80,000 people are employed in production</p> <p>Total economic impact of production is just over 16.5 billion</p> <p>According to USDA there are 17,650 people who have farming as their primary occupation</p>		2012 - \$90,933,000
Sustainable Agriculture	Total number of farms in Pierce County	Agriculture Census		PCD suggests: Define developable and is this a zoning question? USDA data does not specify if ag zone farms or not	2012 – 1,478

Equitable and Healthy Food System

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Equitable and Healthy Food System	% of residents who feel heard and respected in government decision making processes	2015 PSP General Opinion Survey Report Final (2).pdf	Puget Sound Partnership surveyed 1,878 people in Pierce County, and 6% of them strongly agreed that they are well represented by government leaders		2015: 6% *5yr Target is unrelated to benchmark
Equitable and Healthy Food System	Access to fresh and healthy food: Number of Pierce County residents living in a census tract within ½ mile of a community garden (TPCHD)	TPCHD: Pierce County Environmental Health Annual Report	Tacoma Pierce County Health Department measured that Pierce County has “worse access to healthy foods among low-income residents compared to the Washington state average”	Washington State Department of Health stated that at least 15% of people in Washington do not have consistent access to healthy food	2013: 150,000
Equitable and Healthy Food System	The effects of the lack of healthy food are not felt by any one group of people	Tacoma Pierce County Health Department	PCD – needs to track demographic data and compare to Pierce County demographics	2014 Pierce County Census Quick Facts: http://quickfacts.census.gov/qfd/states/53/53053.html 2014 Tacoma Census Quick Facts: http://quickfacts.census.gov/qfd/states/53/5370000.html	2014 Census Demographics
Equitable and Healthy Food	# of residents who are participating in the	PCD – tracking # of residents involved			2015 Baseline #: Community

Pierce Conservation District
Strategic Planning Content to Date
November 5, 2015

System	community-based food system	in Harvest Pierce County programs			Gardens - 1,540 Gleaning Volunteers - 103 Total 1,643
Just and Healthy Food System	# of projects (community gardens, orchards, food forests, gleaning hubs, etc.) throughout Pierce County	PCD – tracking # of community food projects, total and annually	Pierce Conservation District staff		N/A

ENGAGED COMMUNITY

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Engaged Community	# of PCD volunteers annually	2014 - 2020 PCD Annual Report	Pierce Conservation District staff		2014: 1,358 volunteers
Engaged Community	# of K-16 youth engaged in PCD programs	2014 - 2020 PCD Annual Report	Pierce Conservation District staff		2014: 925 K-12 youth engaged
Engaged Community	# of annual volunteer hours	2014 - 2020 PCD Annual Report	Pierce Conservation District staff		2014: 5,714 hours
Engaged Community	# of people attending PCD workshops	2014 - 2020 PCD Annual Report	Pierce Conservation District staff		2014: 977 workshop attendees

Engaged Community	# of visitors to PCD website	PCD – Google analytics	Pierce Conservation District staff	Target based off 2015 baseline data = 5,067 average monthly users by 2020	2015: 1,689 average monthly users
Engaged Community	# of followers on PCD social media	PCD - social media analytics	Pierce Conservation District staff	Target based off 2015 baseline data = 2,262	Jan 1, 2015 = 754
Engaged Community	# of subscribers to monthly email list	PCD – email platform analytics	Pierce Conservation District staff	Target based off 2015 baseline data = 6,892	Jan 1, 2015 = 3,446

Inspired and Educated Youth

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Inspired and Educated Youth	# of K-16 youth reached through education programs in schools, science clubs, after school programs, etc.	District staff tracks	District Annual Report	This measure is specific to education programs, to be considered separately from more general “K-16 Youth Engagement”	2010 – 2014 avg: 823 K-16 youth/yr
Inspired and Educated Youth	# of student contact hours	District Staff Tracks	District Annual Report	As the District modifies and grows its current Environmental Education program, staff anticipates revisiting schools and classrooms multiple times a year, which would lead to either double counting the # of K-16 youth reached, or lower #s than are	N/A

				accurate. By beginning to track student contact hours we'll have a better indicator of our total impact on K-16 youth.	
Inspired and Educated Youth	Youth focused programs across all District departments	District Staff Tracks	N/A	The District's Environmental Education program is focused primarily on upper elementary aged students, this target is aimed at volunteer activities primarily for older aged youth, 15 – 22.	Water Quality's Eagle Scout program is one example.

HUMAN WELLBEING

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Human Wellbeing	Sense of place: % of residents who express a sense of stewardship for the natural environment.	2015 PSP General Opinion Survey Report Final (2).pdf	% of residents who feel the urgency to clean up and protect the waters in and around Puget Sound has increased since the 2012 PSP general opinions survey 80% feel a strong sense of stewardship for Puget Sound's Natural Environment 48% "Sense of Community" that	Based on PSP General Opinions Report, Residents do not feel in control of natural resource decisions related to the Puget Sound 25% are "uninvolved and unconcerned"	2012: 80%

			<p>cleaning up the Puget Sound is urgent, and feel it is appropriate to use tax dollars to help clean up the waters</p> <p>27% “Engaged with Resources” residents work in nature and/or participate in activities involving nature</p>		
Human Wellbeing	Stewardship: Number of residents involved in stewardship activities.	2015 PSP General Opinion Survey Report Final (2).pdf	<p>Participation in community stewardship activities is higher as nearly half participated in the past year (45%)</p> <p>Only 3% participate in weekly stewardship activities</p>		2014: 3,260 – total volunteers/youth engaged/workshop attendees
Human Wellbeing	# of households within a half mile of a community garden	Pierce County Environmental Health Report 2014	Pierce County Environmental Health Department measured about 150,000 residents have access to a community garden PCEHD measures that 49,000 households have access to a farmers market	PCEHD measured this is 2013	2013: 150,000

Excellence in Action

Pierce Conservation District
Strategic Planning Content to Date
November 5, 2015

<u>Ecosystem Value</u>	<u>Indicator</u>	<u>Data Sources</u>	<u>Monitoring Details (Who collects and analyzes, how often, other details)</u>	<u>Additional Notes and Comments</u>	<u>Baseline Benchmark for 5yr Targets</u>
Excellence in Action	Utilize Rate Capacity	PCD Admin Staff	Admin staff	Contingent on potential rate increase	N/A
Excellence in Action	Demonstrate District financial accountability	PCD Admin Staff	Washington State Auditor		N/A
Excellence in Action	Demonstrate District operational accountability	PCD Admin Staff	Washington State Conservation Commission		N/A
Excellence in Action	Secure external funding	PCD Admin Staff	Admin staff		N/A
Excellence in Action	Staff retention	PCD Admin Staff	Admin staff		N/A
Excellence in Action	Bi-annual staff survey	PCD Admin Staff	Admin Staff		N/A