# REGIONAL PROGRAMS AND SERVICES

Of the

# PUGET SOUND CONSERVATION DISTRICTS

July 7, 2016

Puget Sound Conservation Districts

www.pugetsoundcd.org

# Table of Contents

**1.0 SUMMARY** ..... **4**

**2.0 REGIONAL NATURAL RESOURCE MANAGEMENT PROGRAMS & SERVICES** ..... **5**

2.1 Overview ..... 5

2.2 Regional System & Collective Impact ..... 5

2.3 Priority Natural Resource Stewardship Programs ..... 6

2.4 Shared Program Elements ..... 7

**3.0 PRIORITY REGIONAL PROGRAM: SMALL ACREAGE FARMS** ..... **11**

3.1 Introduction ..... 11

3.2 Program Information ..... 11

3.3 Target Audience Outreach, Education & Information ..... 14

3.4 Program Funding & Resources ..... 15

**4.0 PRIORITY REGIONAL PROGRAM: FOREST HEALTH MANAGEMENT** ..... **17**

4.1 Introduction ..... 17

4.2 Program Information ..... 17

4.3 Target Audience Outreach, Education & Information ..... 19

4.4 Program Funding & Resources ..... 20

**5.0 PRIORITY REGIONAL PROGRAM: FRESHWATER & MARINE SHORELINE & RIPARIAN HABITAT STEWARDSHIP** ..... **22**

5.1 Introduction ..... 22

5.2 Program Information ..... 22

5.3 Target Audience Outreach, Education & Information ..... 26

5.4 Program Funding & Resources ..... 27

**6.0 PRIORITY REGIONAL PROGRAM: LID & OTHER STORMWATER MANAGEMENT** ..... **30**

6.1 Introduction ..... 30

6.2 Program Information ..... 30

6.3 Target Audience Outreach, Education & Information ..... 34

6.4 Program Funding & Resources ..... 34

**7.0 PRIORITY REGIONAL PROGRAM: DROUGHT AND CLIMATE RESILIENCY** ..... **37**

7.1 Introduction ..... 37

7.2 Program Information ..... 37

7.3 Target Audience Outreach, Education & Information ..... 40

7.4 Program Funding & Resources ..... 41

**8.0 PRIORITY REGIONAL PROGRAM: REGIONAL FOOD SYSTEMS** ..... **43**

8.1 Introduction ..... 43

8.2 Program Information ..... 43

8.3 TARGET AUDIENCE OUTREACH, EDUCATION & INFORMATION ..... 47
8.4 PROGRAM FUNDING & RESOURCES ..... 48
**9.0 DISCUSSION & CONCLUSIONS ..... 51**
**APPENDIX A – REGIONAL NATURAL RESOURCE MANAGEMENT PRIORITES OF PSCDS ..... 52**
**APPENDIX B – LISTING OF PSCD PROGRAMS & SERVICES ..... 53**
**APPENDIX C – LISTING OF PSCD TECHNICAL & PROFESSIONAL STAFF ..... 60**
**APPENDIX D – PSCD REGIONAL NEAR-TERM ACTIONS ..... 65**

# 1.0 Summary

The 12 Puget Sound Conservation Districts (PSCDs) collaborate through the Puget Sound Conservation District Caucus (Caucus) to align services and programs to recover the health of Puget Sound. Conservation Districts are non-regulatory sub-divisions of state government that strive to help private landowners become better land stewards. Rather than enforcing compliance or imposing penalties, CDs offer information and technical assistance in collaboration with local landowners. Areas of assistance include urban and rural agriculture, urban and rural forestry, freshwater and marine shorelines and aquatic ecosystems, LID and stormwater management, water and energy conservation and more. PSCDs are uniquely positioned by statute, service delivery model, technical capacity, and partnership networks to engage land managers in voluntary stewardship. The following PSCD Portfolio of Priority Regional Programs and Services is a path toward protecting and enhancing Puget Sound natural resources for current and future generations. Regional stakeholders are encouraged to capitalize on the PSCD system through investment in the scopes of work detailed in the following portfolio chapters.

# 2.0 Regional Natural Resource Management Programs & Services

## 2.1 Overview

In 2006, the 12 conservation districts in the Puget Sound region formed the Puget Sound Conservation Districts Caucus (Caucus). The Caucus is committed to taking collective action to address long-standing Puget Sound regional natural resource priorities by collaborating on solutions to common problems and assisting one another when the need arises and circumstances permit. The adoption of an inter-local agreement in 2013 formalized the Caucus and enabled sharing of personnel, services, and programs across the boundaries of the 12 Puget Sound Conservation Districts (PSCDs). To enhance the collective capabilities and capacity of PSCDs and to assist regional partners in understanding the scope, scale and strength of the PSCD system, the Caucus has compiled a comprehensive portfolio of the Puget Sound-wide programs and services that addresses the region's high priority natural resource concerns on multiple scales – from individual parcels to watersheds to the entire Puget Sound region. Individual program areas are described in the following sections.

## 2.2 Regional System & Collective Impact

Consistent with their enabling statute (Chapter 89.08 RCW), Conservation Districts offer a diverse suite of services and programs to address natural resource stewardship priorities. The Puget Sound Partnership Action Agenda identifies the need for collaborative efforts and regional impact. By aligning our efforts through a Caucus, the PSCDs are uniquely positioned to collectively promote and further Puget Sound-wide adoption of natural resource stewardship practices that protect and enhance the health of Puget Sound. PSCD's collective impact approach is multi-faceted. The first is the collaboration of neighboring conservation districts to address cross-boundary watershed-scale environmental issues, and the coordination of outreach efforts for large events with residents from multiple counties. The second mechanism of the PSCD regional system is the transfer of successful programs and services, which may be tailored at the local level to address individual CD capacities and community needs. This is accomplished through the replication and modification of tested programs, the sharing of specialized staff, and the leveraging of regional funding to support action at the local level. The last component of this coordinated approach is broad-scale, uniform messaging and documentation through efforts like the *Better Ground* website, and collective impact and effectiveness monitoring by all 12 individual conservation districts.

The priority programs within this portfolio address local needs within the boundary of each PSCD while collectively benefiting the entire Puget Sound region. Collaboration through the PSCD Caucus ensures regional deployment of consistent scopes of work upon which regional partners can rely. Due to the diversity of technical expertise represented by current PSCD staff, and the opportunities for increased efficiency in conducting programs of regional significance, the PSCD system presents itself as one of the most cost-effective

service delivery models in Washington. Potential efficiencies include but are not limited to:

- *Better Ground*, a regional marketing campaign targeting private landowners;
- Sharing of educational materials (fact sheets, posters, articles etc.) and tools (planning templates, property assessment checklists, customized software programs, etc.) among Conservation Districts;
- Sharing staff to fill gaps in technical or program requirements;
- Linkages between networks and partners amongst Districts;
- Development of a regional pilot program that can be transferred to other Washington Conservation Districts with shared regional issues (ground water, air quality, nutrient management, etc.).

## 2.3 Priority Natural Resource Stewardship Programs

The PSCDs are uniquely positioned to collectively promote and further Puget Sound-wide adoption of natural resource stewardship practices that protect and enhance the health of Puget Sound. The following six priority regional natural resource stewardship programs represent the PSCD Portfolio of Regional Programs and Services (Portfolio) to protect and enhance the health of Puget Sound:

- Small Acreage Farm Programs & Services
- Forest Health Management Programs & Services
- Freshwater & Marine Shoreline & Riparian Habitat Protection & Enhancement Programs & Services
- LID & Stormwater Management Programs & Services
- Drought & Climate Resiliency Programs & Services
- Regional Food System Programs & Services

This Portfolio is organized to provide an overview of the PSCDs regional natural resource stewardship programs and services. Each chapter, representing a regional PSCD program, provides the following:

1) An overview of the natural resource management priority addressed by the PSCD priority program;

2) An introduction to the program/service, including specific program elements (e.g., resource management planning and assessments, educational materials, and more);

3) The target audience(s), methods and approaches to engage that audience through the specific program;

4) The funding model that supports the program and the sources of that funding; the current gaps in service; and an overview of program related 2016 Action Agenda Near Term Actions (Two-year work plans and budgets) approved by the Puget Sound Partnership.

## 2.4 Shared Program Elements

### a. Staff Technical Capacity

The uniquely interdisciplinary nature of Conservation District staff is a critical aspect of our success in implementing hundreds of projects each year to effectively address natural resource protection and enhancement throughout the Puget Sound region. Staff at the 12 Puget Sound Conservation Districts include: civil engineers and survey crews, landscape architects, biologists, GIS specialists, agricultural planners, water quality and environmental specialists, construction managers, botanists, and restoration ecologists- together comprising diverse and proficient practitioners. These specialists frequently support the limited capacity of other agencies and jurisdictions, in a cost-effective and collaborative way.

*See Appendix C – PSCD Technical and Professional Staff*

### b. Use of Best Available Science

Staff across the 12 PSCDs research and utilize the best available science and data to develop programs and provide technical assistance to landowners. All CD programs and assistance are based on practices and standards from the Field Office Technical Guide (FOTG) set forth by the USDA Natural Resources Conservation Service (NRCS). The FOTG is peer-reviewed by scientists and is continually updated nationally. The NRCS conservation practice technical standards are recognized by environmental quality agencies and courts across the United States. Commercial farmers can receive USDA farm program financial support to assist in implementing conservation plans developed to these technical standards. Similar to agricultural initiatives, Conservation Districts develop forestry programs and provide technical assistance using FOTG. These programs require Districts to meet or exceed local, state, and federal programs, which may have additional requirements beyond those of the FOTG.

Additionally, PSCDs use the latest reports and data available at the local scale, whether working on the marine shoreline within the context of priority feeder bluffs identified by the Puget Sound Nearshore Restoration Project and Washington State Department of Ecology research, or while designing shoreline restoration projects that integrate

sea level rise considerations. Other resources include, but are not limited to, Washington Department of Fish and Wildlife's Marine Shoreline Design Guidelines and Washington State Department of Ecology's Stormwater Manual for Western Washington. For forest health management, CDs use National Fire Protection Association Firewise guidelines when working with landowners on wildfire preparedness and mitigation.

The PSCDs also partner with research universities and others to generate new data about innovative concepts. Examples include *working buffers* that further unite agricultural and natural resource goals. Such innovations offer the possibility of multiple benefits: allowing small farm and forest landowners to gain economic benefits from conserving and managing working lands, creating local products, and staying current with the latest scientific research in order to better assist in community planning. Because CDs have and continue to foster relationships with local, state, federal and tribal land managers and decision-makers, they are able to evolve and respond quickly to new data and best available science.

### c. Structural Best Management Practices (BMPs)

#### i. NRCS Designs

BMPs are stored electronically in the FOTG. They are commonly designed to deliver a higher level of performance than what a private engineer would prescribe utilizing other technical standards. By designing and building to a higher standard, it affords the federal government a very high level of insurance against liability for failure. So, if the NRCS is providing financial assistance, it is in a position to exact that level of performance. Because of the precise, technical, and high level specifications attached to NRCS designs, they are not easily transferable without engineering support.

#### ii. Licensed Professional Engineer Design

The typical small acreage landowner, residential landowner or agricultural producer does not qualify for NRCS financial support, and cost is a significant barrier to the implementation of NRCS-certified structural BMPs. In such circumstances, other technical standards are available to licensed professional engineers in order to provide designs that are more economically accessible to the landowner. In stamping the design, the engineer is providing assurance as to the suitability of the structure for its intended purpose. The engineer's professional liability insurance stands behind this assurance.

The PSCDs either have professional engineers in-house or share a regional engineer. Regional engineers are funded through the Washington State Conservation Commission to ensure that the necessary oversight is provided to meet the requirements of the State Engineering Board relative to the design, placement and installation of structures. Three regional engineers serve the PSCDs.

#### iii. Standardized Designs for Building Permits

Conservation Districts have worked with local jurisdictions to develop pre-approved designs for structural BMPs, thereby expediting some permitting processes. It is important to note that this does not obviate the need for the oversight of a licensed engineer to determine the appropriateness of the design and placement of the structure. District engineers, with their knowledge of BMPs for agricultural and other land use practices, provide a unique service that expedites placement of structures without risk to public health and safety.

## d. Outreach and Education

### i. Social Marketing

Social marketing tools are used in specialized campaigns to reach targeted audiences and encourage specific changes behavior change. As identified in the Puget Sound Action Agenda, there is a strong need for creating an effective branding program to increase awareness and investment of private landowners. Social marketing tools are geared to engage community support through programs that are measurable, scalable, and effective.

In collaboration with all of the PSCDs, Snohomish Conservation District developed *Better Ground*, a regional branding approach that will be consistently presented throughout all Conservation Districts in the Puget Sound. The *Better Ground* brand seeks to capture all of the work that CD's do in collaboration with landowners to describe the actions individuals can take, and the impacts that those actions can have on the health of their land and their greater community.

The following Near Term Action (NTA) has been approved by the Puget Sound Partnership for the 2016 Action Agenda. This NTA, written by the Caucus, serves as a two-year work plan with associated budget for the *Better Ground* Program. The Caucus received a seed grant from The Nature Conservancy in early 2016 to initiate steps towards this NTA.

*Better Ground* (NTA 2016-0246) – Increase impact at the local level by providing urban and rural residents with website and outreach tools to implement best management practices on private property.

### ii. Pathways to Deliver Messaging

Conservation Districts continue to invest in traditional approaches of one-on-one engagement, kitchen table meetings, and community events to reach new landowners. CDs also use targeted messaging, as each unique situation calls for appropriate strategies— from farmers to urban residents. Social media tools such as Facebook, Twitter, community radio, video and webpages have all shown positive trends across audiences.

### iii. Webpages

All PSCDs have a home web page highlighting their local programs and services. The PSCD landing page holds the organization's administrative documents, including:

mission, work plan, points of contact and more.

www.pugetsoundcd.org

*Better Ground*, the PSCD's regional brand and outreach campaign has a web page that offers a variety of fact sheets and videos available for the public.

www.betterground.org

### iiii. Tip Sheets, Brochures and Publications

Publications have been developed by local Conservation Districts and are available free to the public to help improve productivity and stewardship of land, reduce impacts of stormwater, and conserve and preserve the area's unique natural resources. These technical resources provide information to help landowners install a BMP or change a management habit that will benefit working lands and protect water quality and other resources.

### v. Newsletters

Each member of the PSCD group produces a newsletter that is distributed to local constituents in paper and electronic formats and to outreach locations such as feed stores, livestock associations, community events and during first-time site visits. Newsletters include announcements about upcoming workshops and events, articles related to natural resource protection and do-it-yourself activities, and stories about landowners who have partnered with their local Conservation District to improve resource conditions.

### vi. Native Plant Sales

All of the PSCDs host annual native plant sales, which provide an opportunity for landowners to purchase low-cost native plants as well as receive information on PSCDs and the programs and services they provide in relation to forestry, low-impact gardening and landscaping, water conservation and drought response and riparian restoration and enhancement.

# 3.0 Priority Regional Program: Small Acreage Farms

## 3.1 Introduction

The Small Acreage Farm Program focuses on the protection of Puget Sound by building awareness around the link between livestock and agricultural practices and the quality of water and habitat, and by identifying and implementing solutions for water quality and habitat protection and enhancement in the Puget Sound region.

## 3.2 Program Information

PSCDs are strategically situated to most effectively connect to and address livestock and agriculture-related water quality issues on private lands. Having hundreds of years of combined experience, PSCDs have established credibility and working relationships with private landowners to provide outreach, technical assistance, farm planning services, and engineering and design work for the implementation of BMPs that protect or enhance water quality on agricultural lands.

**a. Inventory and Assessment - Guidance on Identifying Resource Concerns**

Conservation Districts offer free technical assistance (TA) to all landowners within their District. The first step in TA generally includes a site visit to complete an inventory and assessment of existing resources and associated concerns. The site assessment is done in collaboration between CD staff and landowners. Based on the site-specific assessment, CD staff follow up with recommendations for Best Management Practices (BMPs) to address the resource concerns for the given property.

In most shellfish growing areas, pollution problems and priority actions are identified through a multi-agency Pollution Identification & Correction (PIC) plan process, whereby the local CD provides assistance to correct pollution problems originating on farms. Additionally, CDs are in the process of developing a livestock risk assessment tool that will enable CDs to prioritize resource protection projects within a watershed based on identified levels of risk (high-medium-low). Not only will this tool help CDs more efficiently utilize limited resources, it will also help CDs better describe the impact and results of implemented BMPs in a given watershed—BMPs on high-risk parcels have the greatest benefit to natural resources in a watershed.

**b. Spectrum of Planning Products**

At one end of the spectrum, a resource management system plan (RMS plan), meeting the technical requirements of NRCS, is the most comprehensive conservation plan available to landowners and operators. An RMS plan will address diverse resource concerns related to Soil, Water, Air, Plants, Animals, Humans and Energy. The land, facilities and activities are inventoried and analyzed against

quality criteria to achieve an "RMS" level of performance. These plans are developed by a planner that is experienced in using the NRCS planning process, tools, practices and technical standards. Due to their comprehensive nature, the development of these plans is time consuming— especially when engaging the active participation of the cooperating landowner or operator.

All of the PSCDs have farm planning processes that apply standard practices from the NRCS Field Office Technical Guide (FOTG). In 2015, the Washington State Conservation Commission Center for Technical Development (CTD) launched two planning certifications: *Dairy Nutrient Management and Riparian Planning*. The purposes of the certification programs are to certify individuals as having the necessary skills and abilities to plan to the standards set forth in individual certification guidelines, as well as recognize those planners that have demonstrated an advanced level of knowledge. Additionally, the CTD, with input from many of the PSCDs, is developing a uniform *farm management planning product* that will allow for efficiencies when staff work across county lines or District boundaries to assure consistent products.

At the other end of the conservation planning spectrum, are the special purpose conservation plans that differ in scope but not quality from an RMS plan. For example, *technical assistance letters* focus on the farming practices that may negatively impact fish bearing streams, wetlands and groundwater recharge areas. Further, they often distinguish between operations based on scale. An operation with a large number of livestock that are confined for significant periods require more exhaustive assessment, analysis and complexity of solutions (BMPs) than a farm with a very small herd of horses or cows, or with some chickens on five to ten acres. A *small acreage farm,* typically, does not need more than a short checklist to identify potential impacts to critical areas, a plan of action, and guidance on how to implement the practices. In such cases, standardized planning products achieve the goals of effectively treating the resource concern in an expeditious and economical manner.

Accordingly, PSCD planning formats are suited to address the expectations of funding agencies while addressing the needs of the small acreage farm landowner. In this way, the resource concern (water quality, etc.) can be treated quickly thereby freeing the planner to move on to the hundreds of other small acreage agricultural landowners waiting for assistance.

### c. Range of Assistance to Cooperators

*Educational Workshops and Tours*—PSCDs host workshops and tours to engage and inform agricultural land managers in their area. Topics include, but are not limited to mud and manure management, pasture health, farming for native pollinators, and basic soil fertility. Districts have developed technical guides for the most commonly recommended practices (heavy use areas, pasture management, manure management) that are distributed at workshops and outreach events and that are available on District websites and the *Better Ground* website.

*Soil and water quality testing* –Many PSCDs offer a range of free or at-cost soil and water quality sampling services. Assistance includes helping landowners properly collect samples, determining appropriate tests for a given area, interpreting results and making management or amendment recommendations based on results.

*Equipment Share Programs* –Many PSCDs have low-cost or free equipment share programs that make expensive or, otherwise inaccessible farm resources available to landowners in the District. Available equipment includes: compost spreaders, hay probes, amendment spreaders, no-till drills, mobile meat and poultry processing units, electric fencing tools, weed wrenches and more.

*Sound Horsekeeping Sign Program* recognizes and publicizes horse owners in participating CDs who have taken actions to improve pastures, reduce mud, manage manure and provide wildlife habitat on their property. These actions not only keep horses healthier and make chores more efficient, they also protect streams, creeks, wetlands, and ultimately, Puget Sound.

*South Sound Farm Link* provides a networking opportunity for farmers to connect with landowners who have farmland for lease and other resources to help new and beginning farmers with successful operation startup.

### d. Financial Assistance to Cooperators

#### i. Conservation Reserve Enhancement Program (CREP)

The CREP program is an incentive program that pays 100 percent of the cost to implement riparian area enhancement practices. The program is delivered and implemented in partnership with the Farm Service Agency (FSA), the Washington State Conservation Commission (WSCC) and NRCS. Participants receive annual rental payments and a signing bonus in return for riparian buffer land enrolled in CREP, which is removed from production and grazing under 10-15 year contracts. Typical riparian enhancement practices include tree or shrub planting, livestock exclusion fencing, and off-channel watering facilities along waterways that qualify for salmon recovery.

PSCDs with CREP programs are Clallam, Jefferson, King, Mason, Pierce, Skagit, Snohomish, and Whatcom.

#### ii. Washington State Conservation Commission Cost-share

Washington State Conservation Commission (WSCC) cost-share funding is available to address water quality and habitat impacts related to livestock keeping and agricultural practices. Typical livestock-related resource issues may include: uncontrolled access to streams/wetlands/waterways, overgrazing, soil compaction, excess nutrients and fecal coliform, poor mud and manure management, roof water runoff, surface water management, and bank erosion.

Ranging from 25% to 100% cost-share, WSCC funds typically cover BMPs such as: livestock exclusion fencing, livestock access bridges, off-stream water access, heavy use areas and winter confinement, roof runoff management, mud and manure

management, farm roads, nutrient management, waste storage structures, filter strips and riparian buffers. Districts use the NRCS FOTG standards and specification, or BMPs developed by a licensed engineer.

#### iii. Local Sources of Cost-share

Local sources of cost-share are used to implement BMPs that address water quality impairments and habitat impacts associated with livestock practices. Local county sources are currently available in several PSCDs including King, Kitsap, Mason, Pierce, Skagit, Snohomish and Thurston.

Local sources of cost-share are typically provided through the CDs county by surface water fee collections and Shellfish Protection Districts. Pollutions Identification & Correction (PIC) funds are often used in targeted geographic areas for the improvement of water quality impairments. Often, funds are prioritized by the working partnership between the county and the Conservation District in priority watersheds.

A Conservation District system of assessment/rates and charges that has been approved by a local County Council or County Commissioners provides the associated Conservation District with local funding from parcel collections. These funds are available for cost-sharing programs on the implementation of BMPs to address agriculture-related water quality and habitat impacts. Using NRCS FOTG criteria or a local engineer, farm operators can participate in cost-share programs for priorities that have established by local CDs.

## 3.3 Target Audience Outreach, Education & Information

### a. Target Audience

The Small Acreage Farm Program is the most diverse program offered by the PSCDs. Varying in size from city lots to several hundred acres, small farms are a network of diverse systems of operation that have many varieties and types of livestock and/or crops in production and numerous impacts, needs, and opportunities for collaboration.

Individual farm operators have different skill sets, knowledge, and experience relating to natural resource protection, but they all rely on the non-regulatory guidance and voluntary compliance opportunities that Conservation Districts offer. The relationships that are built between CDs and small farm operators are developed through a cooperative approach that seeks to balance landowner goals with community goals for the environment. These relationships are built on trust, respect, common interest, and shared understanding of goals. The partnering ability Districts bring to the table is the key factor in the success of these programs.

Natural resource protection measures are developed through this working relationship. Approved measures and BMPs are vetted, agreed upon, and implemented either by the landowner or through District cost-share opportunities.

## 3.4 Program Funding & Resources

### b. Current Funding Model

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism to conservation districts in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds can be used to support all aspects of the PSCD Caucus Small Acreage Farm Program, including technical assistance, outreach and education, and cost-share activities conducted to address livestock and small farm-related water quality and habitat impacts. PSCDs that currently have a local system of assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston Conservation Districts.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding to support Small Acreage Farm Programs. Grant funding through the Commission includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD Small Acreage Farm programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs have ranged from $79,625 to $128,893.
- Annual CREP Technical Assistance funds can be used to fund administrative and technical assistance costs related to planning and implementing CREP contracts on eligible agricultural properties within each District. Annual CREP TA funding for PSCDs have ranged from $1,075 to $322,953 among participating Districts. Currently, 9 of the 12 PSCDs receive CREP funding (Refer to Appendix B for details).
- Irrigation Efficiencies (IE) funds can be used to support technical assistance to design, develop and administer irrigation water savings projects, write irrigation water management plans, and provide financial incentives –up to 85 percent of total project costs for installation of irrigation systems that save water. Currently, one of the 12 PSCDs receives Irrigation Efficiencies funding in the amount of $49,865 annually for technical assistance. Additional funding may be available to implement irrigation efficiency practices.
- Engineering funds support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices. This funding supports three engineers housed at three CDs around Puget Sound that provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective “clusters”.
- Livestock Technical Assistance funds support all aspects of TA to landowners with livestock, including: site visits, farm planning, classes and workshops, development of outreach and education materials, and more. Currently, 11 of 12

PSCDs receive Livestock TA funding with amounts ranging from $1,000 to $201,028.

**b. Funding Access and Gaps**

Each of the 12 PSCDs offer small acreage farm programs, and many landowners are in queue to implement practices for the benefit of water quality and habitat protection and enhancement. But funding for this work is not at a scale that supports the delivery of a robust regional Small Acreage Farm program – neither staffing capacity for planning and other technical services, nor cost-share to support implementation of BMPs are at necessary levels to meet existing needs.

**c. Two-year Regional Work Plan**

The following Near Term Actions (NTAs) have been approved by the Puget Sound Partnership for the 2016 Action Agenda. These NTAs, written by the PSCD Caucus and the Washington State Conservation Commission, serve as unfunded two-year regional work plans and budgets associated with the PSCD Caucus Priority Small Acreage Farm Program.

*Conservation Reserve Enhancement Program Expansion* (NTA 2016-0073)

Expand the Conservation Reserve Enhancement Program statewide by completing an assessment of rivers and streams to guide future grants, identify landowners' motivations to increase participation, identify additional funds required for incentives, and conduct a pilot project.

*Monetizing Stewardship of Dairy Manure* (NTA 2016-0244)

Determine conditions for a viable market for products derived from dairy manure produced in the Nooksack and Skagit watersheds to incentivize manure management practices that reduce their adverse impact on critical shellfish beds.

*Puget Sound Clean Waters Livestock Stewardship Program* (NTA 2016-0370)

Provide enhanced educational opportunities, technical assistance, and conservation planning tools, project designs, and financial assistance to livestock owners to prevent fecal coliform pollution.

*Puget Sound Water Quality Trading Market Proof of Concept* (NTA 2016-0404)

Build upon the Dept. of Ecology report on conservation markets and explore whether there are adequate buyers and sellers in Puget Sound watersheds for the potential implementation of a water quality trading program. Serve as a proof of concept for how to achieve Puget Sound recovery through an incentives approach.

# 4.0 Priority Regional Program: Forest Health Management

## 4.1 Introduction

The USGS Land Cover Trends Project, which characterized land cover changes from1973 – 2000 in the Puget Sound region, used satellite imagery to estimate that the dominant land-cover class in 2000 for Puget Lowland was forest land (48.4 percent). This study also estimates that the largest net change for any land-cover class between that time period was the conversion of 682 $mi^2$ forest land (10 percent of the land area of the eco-region). The Results Washington report on "*Forest Land Conversion in Washington State*" reports that over 1,000 $mi^2$ of forest land were converted during a similar time frame. Additionally, this report identifies that approximately 1/3 of the non-federal timberlands are held in non-industrial private ownership. In response to these Puget lowland forest land trends, the PSCDs have prioritized protecting and enhancing forest health and associated forest resources on non-industrial private forest lands (NIPF).

Healthy forests are an integral component of the hydrologic cycle, and mitigate the impacts of stormwater runoff and associated pollution as water flows to the Puget Sound. Healthy Pacific Northwest forests play a critical role in supporting habitat functions and values for fish and wildlife species. Well managed forests –both urban and rural— mitigate climate change through carbon sequestration, and non-industrial private forests (NIPF) are an integral component of the changing landscape of Puget lowland working forests.

## 4.2 Program Information

PSCD forest health management (FHM) programs and services focus on protecting and enhancing Puget Lowland forest ecosystem functions and values, reducing forest land conversation, and supporting NIPF landowner efforts to maintain their property as working forests. PSCDs provide information, education, technical assistance, and financial incentives to non-industrial private forest landowners, and rural and urban residents.

### a. General Technical Assistance and Forest Health Stewardship Planning

Staff at the 12 Puget Sound Conservation Districts include professional foresters, wildfire preparedness and fuels reduction experts, civil engineers, GIS specialists, soil scientists, water quality and environmental specialists, and education specialists who comprise a diverse and proficient group of practitioners focused on forest health improvement, timber management and urban forestry.

This cadre of PSCD resource management professionals assists landowners in developing and implementing *Forest Health Stewardship Plans (FHS Plans)*. FHS Plans include a characterization of forest health resource concerns, improvement strategies and implementation time lines to address these concerns, and include recommendations for Best Management Practices that will improve forest health conditions. BMPs typically included in FHS Plans focus on forest health and forest stand improvements through disease and pest management, thinning to improve

forest stand structure, native tree and understory plantings / establishment, invasive species control, and fuels reduction and treatment. Additional BMPs may include erosion and sediment control practices where indicated, riparian protection and enhancement if applicable, and other fish and wildlife habitat enhancement practices such as fish passage improvements where indicated.

**b. Timberland Management and Forest Health Stewardship Plans**

*Forest Health Stewardship Plans* may be used as *Timber Management Plans* to help landowners qualify for the state Designated Forest Land Program (Chapter 84.33 RCW). Forestland classified as forest land within the Designated Forest Land Program (DFLP) is taxed on the timber value of the land and not on the highest and best use value of the land (generally developed). See the section titled *Financial Assistance to Cooperators* for me information on tax benefits associated with this program.

**c. Wildfire Preparedness and Firewise Communities/USA Program**

Districts have become leaders in wildfire preparedness and Firewise program delivery in Washington State. With devastating fires in eastern Washington, some eastern Washington CDs have played a key role in providing emergency response and post-wildfire land rehabilitation support to private landowners. In the event of wildfires in western Washington, PSCDs have access to this experienced workforce through the Washington conservation district system. Firewise Program related services are provided by a number of PSCDs. These efforts focus on helping landowners and communities reduce the risk of wildfire-related impacts on infrastructure by completing home and community wildfire risk assessments, preparing Firewise action plans, conducting fuels reduction and ladder fuels management events for Firewise Communities and other priority wildfire risk management areas, and providing cost share for and coordination of other fuels reduction projects to increase fire resilient properties.

**d. Financial Assistance to Cooperators**

Conservation Districts utilize a variety of financial incentives to assist land and homeowners in caring for their trees and stands, large or small. Financial incentives tools included in the PSCD toolbox include access to cost-share, grant and various tax incentive programs.

**i. Cost-share Programs**

There are formal and informal cost-share programs available to NIPF landowners. Federal cost-share is available through the USDA Natural Resources Conservation Service Environmental Quality Incentives Program, and funds forest and timberland improvement practices. State cost-share is available through the Washington State Conservation Commission Implementation, Shellfish and Non-shellfish grant programs, and fund similar practices. Local cost-share is provided by some PSCDs that utilize special assessments or rates and charges collections. An example is the *King Conservation District Land Owner Incentive Program* that helps forest landowners implement forest health management practices included FHS Plans. See

section 3.2.d.1 for more detailed descriptions of CREP, WSCC and local cost-share programs.

Informal forest health management cost-share include PSCD programs that focus on FHM project implementation. Examples include the *Snohomish Conservation District Free Trees Program*, which increases and improves tree canopy cover by providing free trees to rural and urban landowners; and the *King CD Native Plant Cooperative*, which increases upland reforestation and riparian and wetland enhancement projects by providing trees and shrubs and other project support in exchange for volunteer service at a King CD administered native plant nursery.

#### ii. Grant Programs

PSCDs help NIPF landowners access a number of grant programs to support implementation of practices included in FHM Plans. These funding sources include Salmon Recovery Funding Board grants, and the Department of Natural Resources (DNR) Small Forest Landowners Office Family Forest Fish Passage Program funding. While this type of funding can make the difference between planned and implemented practices, requests for assistance exceed the resources available.

#### iii. Tax Incentive Programs

Throughout the Puget Sound region, land values for development are high, which in turn increase the rate of forest land conversion. Tax incentive programs are a critical tool for landowners to afford maintaining land in forest use. PSCDs often work with county assessor offices to insure their forest landowners are in compliance with tax incentive programs. For example, when land in the Designate Forest Land Program (DFLP) transfers to new ownership, often an updated Timber Management Plan must be submitted and approved by the county assessor in order for a continuance to be signed for forest land to remain in this tax program. When forest land is managed for conservation and habitat values and is not eligible for the DFLP, a forest stewardship/management plan may be developed with the landowner to qualify for public benefit rating system (PBRS) programs. Updated FHM Plans are prerequisite to quality for enrollment in the DFLP and PBRS Programs.

## 4.3 Target Audience Outreach, Education & Information

### a. Target Audiences

Landowners and residents stewarding forests, street trees and open space—including family forest owners, urban forest owners, and woodlot owners—can enhance wildlife habitat, reduce storm water runoff, and improve human health and wellbeing. Most of these small, non-commercial forested lands fall below thresholds for support through other agency programs and services. Yet together, they represent a vast resource that contributes to the overall health of our environment and community.

### b. Education Information

Forest health outreach efforts and education programming offered to NIPF landowners has a proven track record of effectively increasing knowledge about and improving implementation of forest health stewardship strategies and practices. PSCD FHM and forest stewardship outreach efforts focus on ecosystem functions and values of rural and urban forest stands and street trees, and wildfire risk management. A significant portion of forest landowner outreach and education is supported by a collaboration with the WSU Extension Forestry program. Most PSCDs partner with local WSU Extension Forestry Programs to offer Forest Field-days, Twilight Tours and other workshop/short course educational programming. The WSU flagship program, Forest Stewardship Coached Planning (FSCP), is often delivered as a three-way partnership between local WSU, PSCDs and DNR with speakers and trainers provided by the three entities. In some cases, funding from a local PSCD supports the offering of the FSCP program. These and other outreach and education efforts serve to directly market PSCD forest health management programs and services to NIPF landowners.

## 4.4 Program Funding & Resources

### a. Current Funding Model

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds can be used to support all aspects of the PSCD Caucus Priority forest health management programs, including outreach, education, technical assistance and financial incentive program activities conducted to address forest management-related water quality and habitat impacts. PSCDs that currently have a local system of assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston Conservation Districts.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding. Grant funding through the Commission includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD forest health management programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs ranges from $79,625 to $128,893 per district.
- *Firewise* funds may be used to conduct *Firewise* risk assessments, prepare *Firewise* plans, fund fuels reduction practices, install signage for homes and evacuation routes, and conduct *Firewise* program related outreach and education. For State FY17 (July 1 2016 – June 30, 2017), a new source of *Firewise* funding has come available to PSCDs. Washington conservation districts, including PSCDs, had the opportunity to apply for up a maximum of $50,000 to implement *Firewise* programming within their district boundaries.

- Engineering funds support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices—many that are NRCS-certified –in association with PSCD FHM programs and services. This funding supports 3 "cluster" engineers housed at 3 PSCD who provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective "clusters".

**b. Funding Access and Gaps**

Six of the 12 PSCDs offer forest health management programming, and all PSCDs hold staff with forestry-related education and experience. Graduates of the WSU Forest Stewardship Coached Planning course and recipients of the forest health planning services are in queue to implement planned forest health management practices, but funding for cost-share to support implementation of planned forest health related practices is limited. Furthermore, FHS planning is not funded at a scale that supports the offering of these services by all PSCDs. Forest health services funded at a robust regional scale would include the following:

- Forest stewardship planning
- Technical Assistance for stewardship plan implementation
- Firewise community and home assessments
- Fuels reduction labor crews
- Monitoring and research
- Cost-share dollars for project implementation

**c. Two-year Regional Work Plan**

The following Near Term Action (NTA) has been approved by the Puget Sound Partnership for the 2016 Action Agenda. This NTA, written by the Caucus, serves as an unfunded two-year regional work plan and budget for the PSCD Caucus priority Forest Health Management Program.

*Forest Health Management for Reduced Stormwater Runoff & Land Conversion* (NTA 2016-0332)

Perform GIS mapping to identify and prioritize forestlands for preservation and restoration. Target forest health management services to reduce or prevent conversion, reduce stormwater runoff, and protect and improve water quality.

*Urban Tree and Forest Canopy Cover Toolkit* (NTA 2016-0343)

Research and develop a toolkit for Puget Sound communities about trees, forest canopy and stormwater so that local staff has increased awareness/resources to implement tree programs which strategically enhance stormwater management and habitat function**.**

# 5.0 Priority Regional Program: Freshwater & Marine Shoreline & Riparian Habitat Stewardship

## 5.1 Introduction

The extensive freshwater river and stream systems, lakes, wetlands, and dynamic marine shorelines of the Puget Sound shape this area's distinctive and iconic sense of place. These aquatic areas also form the basis of our northwest fisheries, not least among them our salmon fisheries and aquaculture resources. They also provide other critical services such as groundwater recharge, stormwater management, and habitat for myriad marine, anadromous, and terrestrial species. The interface between land and water has historically been one of the richest, most complex, and most contested of spaces. The uniquely collaborative approach of Conservation Districts has resulted in significant inroads with private landowners toward protecting and enhancing freshwater and marine shorelines and riparian habitat in this challenging context.

PSCSs have a demonstrated long term commitment to addressing shoreline and riparian habitat resource management concerns. PSCD shoreline and riparian habitat programs address water quality and non-point source pollution; water quantity – including adequate in-stream flow in dry summer months and reduced extreme flow events during winter storms; and the protection and enhancement of ecological processes and habitat in freshwater and marine shoreline and riparian systems

## 5.2 Program Information

PSCDs take freshwater and marine shoreline and riparian habitat protection and enhancement from the theoretical and bring it into real life by working directly with property owners on planning and implementing stewardship projects that protect and enhance aquatic resources. CDs have skilled staff members with diverse knowledge who work closely with communities and organizational partners to identify and address resource concerns such as water quality impairments, riparian degradation, invasive weed encroachment, stream and shoreline armoring and modification, and watershed and landscape-scale assessments impacting these resources.

### a. Inventory and Assessment

The great majority of shoreline and riparian habitat stewardship projects take place on private properties and in voluntary partnership with private landowners. Some projects are the result of years of collaboration between landowners and Conservation District staff, who thoughtfully, steadily build trust and confidence within a priority watershed.

To enhance aquatic conditions along freshwater and marine shorelines and within additional critical areas such as streams and wetlands, Conservation Districts provide a diverse range of technical planning and design services:

- Site-specific weed management, native vegetation restoration, and critical area mitigation plans for small residential and multi-acre conservation sites;
- Multi-phase, successional forest diversification strategies for habitat enhancement in riparian corridors;
- Engineered and/or bioengineered habitat and streambank stabilization projects, fish-friendly bridges and culverts, engineered log jams, marine bulkhead removal and soft shoreline stabilization projects;
- GIS-based assessments of riparian canopy cover and invasive weed dispersal to inform restoration strategies;
- Water quality monitoring and Total Maximum Daily Load (TMDL) response; water quantity management such as irrigation efficiency and floodplain reconnection projects

**b. Spectrum of Aquatic Enhancement and Protection Services**

Nowhere but within Conservation Districts can residents find cost-effective technical competence, vision, and collaborative skills to continue to make steady progress towards better aquatic resources stewardship for everyone involved. A sampling of the broad range of initiatives (past and present) includes:

*Anadromous Fish Habitat Protection & Enhancement*— The Mason CD anadromous fish habitat enhancement program serves as a PSCD regional model for identifying and implementing anadromous fish habitat improvement projects. The Mason CD prioritizes freshwater and marine anadromous fish habitat enhancement projects based on analyses, restoration plans, and priority project lists prepared by regional partners and stakeholders (Tribes, WDFW, Dept. of Public Works, WA DOT, lead entities, salmon enhancement groups, etc.). At the same time, the Mason CD takes advantage of opportunities to advance projects where willing landowners have expressed an interest or have needs aligned with regional salmon recovery priorities. The types of projects supported include fish passage barrier removal, in-channel habitat enhancement, armor removal and soft-shore protection projects, and flood plain reconnection and restoration projects. Services provided include conducting topographic surveys, preparing P.E. stamped project designs, preparing public works bid documents, providing contract supervision, and performing construction management.

*Basin-level Invasive Species Control*—The Pierce CD Habitat Restoration Program includes a basin-level invasive species eradication program that serves as models for a regional PSCD approach to programmatic invasive species control at the basin-level. The Pierce CD invasive species control program currently focuses on Knotweed control and is moving toward control of other target invasive species. Their step-wise approach to basin-level invasive species control includes inventory of priority watersheds to identify and map invasive species populations, work with local stakeholders to plan and implement eradication strategies, and monitor eradication sites for natural recruitment of native trees and shrubs and identify where infill with native plants is needed.

*Basin-level Water Quality & TMDL Response*—The Jefferson CD has implemented two long-term basin-level water quality monitoring projects that serve as models for a regional PSCD approach to integrating monitoring derived data trends into shoreline and riparian habitat protection and enhancement efforts. The Jefferson CD water quality monitoring program has collected temperature, PH, DO, fecal and fish presence / absence data in the Chimacum Basin for the past 20 years and the Discovery Bay basin for the past 10 years. These data sets have allowed the Jefferson CD to describe basin-level water quality trends over time, document the water quality benefits of installed stewardship practices (e.g., reduced water temperature in the vicinity of installed riparian enhancement projects, reduced fecal coliform in the vicinity of manure management and livestock exclusion practices), and prioritize geographic locations for implementation of specific stewardship practices (e.g., prioritize additional riparian plantings, manage septic management, etc.)

*Clear Choices for Clean Water*—Developed by Thurston CD, Clear Choices for Clean Water is an incentive-based behavioral change program that educates residents of a Shellfish Protection District about Puget Sound water quality issues and the impacts of water quality impairments on shellfish production; reduces barriers for residents to change their behaviors to positively impact water quality; and partners with shellfish growers, local government and other water quality organizations to increase awareness of Puget Sound issues and available science.

*Riparian Cover Assessment & Enhancement*—Riparian cover assessment and enhancement programs are offered by all PSCDs. PSCD riparian enhancement programs include the Conservation Reserve Enhancement Program (CREP), and residential riparian enhancement programs that serve both urban and rural properties. All programs focus on improving riparian conditions in priority geographic areas and/or on priority properties. Refer to Chapter 3, section 3.2.d.i for details on the CREP and a list of PSCDs with active CREPs. An example of a PSCD residential riparian enhancement program is the King CD Aquatic Area Protection and Enhancement Program. This full service riparian restoration program identifies, designs and implements riparian enhancement projects on urban and rural residential properties. PSCDs with similar programs include Clallam, Jefferson, Kitsap, Mason, Pierce and San Juan, and include prioritized restoration initiatives in Oakland Bay Watershed in Mason County; False Bay Watershed Hydrologic Study and Restoration Planning in San Juan Island County; and the Chimacum Basin Watershed Restoration and Protection Plan in Jefferson County.

*Shore Friendly Program*—This Mason CD program serves as models for a regional PSCD approach to integrating social marketing principles and practices into marine shoreline homeowner / landowner services. The Mason CD program has adapted and utilizes the WDFW Shore Friendly marketing campaign and resources to connect waterfront residents with technical support and resources to make informed, cost-effective and environmentally-friendly decisions about shoreline management. As a part of this program, Mason CD offers free, non-regulatory site

visits and erosion assessments to help landowners identify problems or opportunities specific to your stretch of the shoreline.

*Where the Water Begins*—This King CD program serves as PSCD regional model for a complete marine shoreline landowner stewardship literacy and implementation program. The King CD program helps marine shoreline landowners navigate the complexities of stewarding marine nearshore and riparian resources by providing *free* workshop-based learning opportunities, free non-regulatory site visits, and habitat enhancement project cost-share funding. Workshops focus on the ecology of the Puget Sound marine near-shore environment, coastal geological processes and associated property management risks, and vegetation management to control erosion, stabilize slopes, and improve fish and wildlife habitat. Workshop participants receive a site visit to learn about marine shoreline stewardship opportunities specific to their properties. A resulting site visit report includes resource protection and enhancement recommendations, and an associated cost-share program helps implement bulkhead removal and riparian habitat enhancement practices identified in the personalized site-visit reports.

*Working Buffers*—The Snohomish CD riparian habitat program combines agriculture and tree production to promote wider forested streamside buffers on agricultural lands without losing farmable ground. Tree crops, such as fruits, nuts, and timber, are combined with understory crops, such as berries, floral industry foliage, mushrooms and livestock forage. This multi-use land management benefits the farmer and the long-term health of his land. Specific benefits include diversification of marketable products, improved soil health, increased pollinator habitat, enhanced protection from flood damage, improved water quality, improved wildlife habitat, and additional carbon sequestration.

### c. Financial Assistance to Cooperators

Conservation Districts utilize a variety of financial incentives to assist land and homeowners in caring for their freshwater and marine shorelines and riparian habitat. Financial incentives tools included in the PSCD toolbox include access to cost-share, grant and various tax incentive programs.

#### i. Cost-share Programs

There are a number of formal cost-share programs available to shoreline landowners. Federal cost-share is available through the USDA Natural Resources Conservation Service Environmental Quality Incentives Program and the Conservation Reserve Enhancement Program (CREP). State cost-share is available through the Washington State Conservation Commission (WSCC) Implementation, Shellfish and Non-shellfish grant programs, and fund similar practices. Local cost-share is provided by some PSCDs that utilize special assessments or rates and charges collections. An example is the *King Conservation District Land Owner Incentive Program* that helps marine shoreline landowners implement bulkhead removal and marine riparian/forest health management practices and helps freshwater shoreline landowners implement riparian enhancement practices and

water-crossings. See section 3.2.d.1 for more detailed descriptions of CREP, WSCC and local cost-share programs.

#### ii. Grant Programs

PSCDs help shoreline landowners access a number of grant programs to support implementation of shoreline and riparian protection and enhancement practices where these projects align with the goals of particular grant programs. Grant funding sources for these projects include the US Environmental Protection Agency, US Fish and Wildlife Service, National Estuary Program, Salmon Recovery Funding Board (SRFB), and others. While this type of funding can make the difference between planned and implemented practices, requests for assistance exceed the resources available.

#### iii. Tax Incentive Programs

As noted in the Forest Health Management Chapter tax incentive programs are a critical tool for landowners to afford maintaining land in current use. Properties located in counties with current-use taxation programs, such as the King County Public Benefit Rating System (PBRS) program, may qualify for enrollment based on the completion of shoreline and riparian enhancement / protection practices.

## 5.3 Target Audience Outreach, Education & Information

### a. Target Audience

PSCD freshwater and marine shoreline and riparian habitat protection and enhancement programs serve urban and rural residential homeowners, agricultural landowners, and commercial businesses and public institutions (e.g., schools, public open space holdings).

### b. Outreach, Education and Information

The most effective outreach methods are hands-on, applied learning opportunities for both adults and youths. Consistent with the hands-on and applied learning approach, PSCD shoreline and riparian habitat protection and enhancement programs are engaging target audiences through outreach efforts that employ a wide array of resources and techniques. Program marketing efforts include distribution of program information at local fairs, festivals, farmers' markets, and through print and electronic media, such as CD newsletters and web pages, local papers etc. Resource materials are similarly distributed and include information on the functions and values of rivers, streams and wetlands; riparian restoration 'how-to' guidance such as native plant species lists and local nursery contact information; recommendations for specific stewardship activities and best management practices; and information on project funding sources such as grants and incentive programs. Social marketing strategies, like that utilized in the *Shore Friendly Program,* are used to engage specific segments of the Puget Sound community on priority actions such as marine shoreline armor avoidance or removal. Education

programming, such as the *Where the Water Begins Program*, is used to support more advanced literacy on shoreline and riparian habitat stewardship, such as avoiding activities that increase erosion or remove beneficial trees and shrubs.

## 5.4 Program Funding & Resources

### a. Current Funding Model

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism to Conservation Districts in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds can be used to support all aspects of the PSCD Caucus Priority shoreline and riparian habitat programs, including outreach, education, technical assistance and financial incentive program activities conducted to enhance riparian buffers, improve fish passage, remove bulkheads, et cetera. PSCDs that currently have a local system of special assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston Conservation Districts.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding. Grant funding through the Commission includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD shoreline and riparian habitat protection and enhancement programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs ranges from $79,625 to $128,893 per district.

- Annual CREP Technical Assistance funds can be used to fund administrative and technical assistance related to planning and implementing CREP contracts on eligible stream/river reaches within the boundary of each PSCD. Annual CREP TA funding for PSCDs ranges from $1,075 to $322,953 among participating Districts. Currently, 9 of 12 PSCDs receive CREP funding (Refer to Chapter 3.2.1.d and Appendix B for details).

- Irrigation Efficiencies (IE) funds can be used to directly address in-stream flow concerns in eligible basins through technical assistance to design, develop and administer water savings projects, write irrigation water management plans, and provide financial incentives –up to 85 percent of total project costs—to landowners willing to install irrigation systems that save water. Currently, 1 of 12 PSCDs receives Irrigation Efficiencies funding in the amount of $49,865.

- Engineering funds can be used to support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices—many that are NRCS-certified –in association with shoreline and riparian habitat protection and enhancement

programs. This funding supports 3 "cluster" engineers housed at 3 PSCD who provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective "clusters".

Additional funding sources being utilized in varying degrees among the PSCDs include:

- Salmon Recovery Funding Board grants
- National Estuary Program grants
- Other Environmental Protection Agency grants
- Floodplains by Design grants
- Washington State Department of Ecology Centennial Clean Water Fund grants
- Shellfish Protection District funds

**b. Funding Access and Gaps**

Like agricultural services, aquatic resources have been a primary focus within Conservation Districts historically, and for this reason there is a foundation of skilled staff. However, significant staffing needs remain that, if met, would result in significant gains in aquatic resource protection and enhancement Puget Sound-wide.

An area of critical aquatic concern and growing demand within the PSCDs is that of marine shoreline technical capacity. Currently, two PSCDs (Mason and King) house marine nearshore focused-staff, and engineers with coastal expertise. Continued expansion of available marine expertise within the PSCDs will expand the number of marine shoreline restoration, armor removal, and soft shore stabilization projects taking place around the Puget Sound shoreline.

**c. Two-year Regional Work Plan**

The following Near Term Actions (NTAs) have been approved by the Puget Sound Partnership for the 2016 Action Agenda. These NTAs, written by the Caucus, serve as unfunded two-year work plans and budgets associated with the PSCD Caucus Priority Regional Shoreline & Riparian Habitat Protection & Enhancement Program.

*Expand Conservation District Shoreline Technical Assistance in Puget Sound* (NTA 2016-0268)

Establish a network of conservation district programs to collaborate with shoreline landowners and promote naturally functioning marine shorelines using outreach, technical assistance, site assessments, design, and cost-share for restoration and protection projects.

*Conservation Reserve Enhancement Program Expansion* (NTA 2016-0073)

Expand the Conservation Reserve Enhancement Program statewide by completing an assessment of rivers and streams to guide future grants, identify landowner

motivations to increase participation, identify additional funds required for incentives, and conduct a pilot project.

*Riparian Restoration throughout the Greater Puget Sound* (NTA 2016-0270)

Expand on efforts to restore and protect naturally functioning riparian and floodplain areas by conducting plantings, site maintenance, knotweed inventories, and control. Develop a unified riparian implementation-tracking tool.

# 6.0 Priority Regional Program: LID & Other Stormwater Management Services

## 6.1 Introduction

Managing stormwater is a key foundation of Conservation District services. For over 75 years, conservation districts have been providing this type of expertise as an element of farm and habitat planning - to address concerns like nutrient runoff, mud, drainage, and water quality and quantity. Today, as our communities have become more urbanized, the impact that stormwater has had on natural resources like Puget Sound has magnified. Many conservation districts have chosen to adapt their programming to address arising stormwater related concerns. As such, stormwater has emerged as a valuable opportunity to begin to address urban and residential issues, and to expand partnerships to city jurisdictions and agencies.

## 6.2 Program Information

In addition to the standard stormwater NRCS best management practices, many conservation districts offer programming in natural yard care, low-impact development (LID), and urban forestry. Natural yard care has arisen as a strong regional focus, and is frequently a first step for landowners implementing conservation practices at home. LID is also gaining in popularity among landowners, and is a requirement by the Department of Ecology in new development. Urban forestry and the benefits that canopy tree cover lend to stormwater mitigation is also more widely understood and adopted among communities. Almost 90% of Puget Sound Conservation Districts provide some form of technical assistance, outreach, or strategic partnerships related to LID. This field is quickly evolving, and CDs are emerging in the Puget Sound region as leaders and essential partners to accomplish on-the-ground, community-based projects in both rural and urban landscapes.

### a. Inventory and Assessment

Collectively, Puget Sound Conservation Districts are much stronger in their stormwater programming than as individual districts. Some districts have robust, stable programs with up to 2.5 full-time employees, while other district programs are limited to 0.5 FTE, dependent on grant-funded projects. In 2016, PSCD received funding to form a Regional Stormwater Action Team, to help CDs with limited capacity, replicate successful models, and combine efforts within key watersheds.

In addition to providing technical assistance to private landowners, PSCDs help municipalities meet and exceed their National Pollution Discharge Elimination System (NPDES) permit as required by the state Department of Ecology, and together work with over 50 jurisdictions throughout the region. In many cases, this is by providing permitees with stormwater education for adults and youth,

demonstration sites, and effectiveness monitoring. CDs are also assisting cities in their own critical transition to low-impact development – and pilot retrofit projects have been very successful in helping some jurisdictions become more comfortable with designing, implementing, and maintaining green stormwater infrastructure

**b. Spectrum of LID and Stormwater Management Services**

Districts have decades of experience utilizing the suite of NRCS best management practices that address stormwater runoff in the rural environment - including pasture and paddock management, compost facility construction and maintenance, buffers, and heavy use areas. These elements are frequently integrated into Farm Plans and technical assistance letters, and may receive cost-share opportunities - particularly in watersheds of concern where funding is available.

Puget Sound Conservation Districts also provide the following LID practices:

- Urban forestry
- Rain Gardens and Bio-retention facilities
- Vegetated Swales, Buffers, and Strips
- Rain Water Catchment and Reuse; Rain Barrels and Cisterns
- Soil Amendments
- Impervious Surface Reduction and Disconnection; Permeable pavements
- Pollution Prevention; Natural Yard Care

The planning products for these practices include engineered designs, technical assistance letters, project management, and potential cost-share where available. Several districts also conduct water quality sampling and monitoring programs to identify areas of concern, and measure effectiveness of BMP implementation.

**c. Regional Models**

*Stormwater Management Manuals* –Clallam CD prepared a stormwater management manual for low density residential land use in Clallam County in response to concerns about the impacts of stormwater management requirements on homeowners and home builders.

*Watershed Masters Program*—Skagit CD has developed this program to increase public awareness on a variety of water quality problems and solutions and to inspire community stewardship in regards to water management; and the Backyard Conservation Stewardship Program empowers landowners to protect and conserve natural resources and wildlife habitat one yard at a time.

*South Sound GREEN*— is a watershed education project targeting 4th-12th grade classes in Thurston County. This program not only engages more than 50 teachers and 1200 students in hands-on science, but also trains and engages more than 200 community volunteers to assist with education each year. Through this program, students identify actions they can take to improve their watershed. This often

involves riparian restoration, invasive species removal, and the installation of rain gardens and bio-swales to better manage stormwater runoff.

*Rain Garden Program*- Both Kitsap and Snohomish CD have successful residential rain garden programs in partnership with their local jurisdictions, and have installed over 200 projects in the last 5 years. Other districts and their communities are also expressing interest in this type of program. In areas like the City of Seattle where there is already significant public investment in rain garden programs, there are still identified gaps that some partners are urging conservation districts to fill, such as supporting private landowners throughout the rebate process.

*Rain Barrel Program*- Snohomish Conservation District began retrofitting 50 gallon drums into rain barrels in 2012. Since then, rain barrels have become one of their most popular stormwater initiatives, and they have been sold at cost to more than 2,000 landowners. Rain barrels have been found to be a valuable first-step for many homeowners to become aware of issues like runoff, water conservation and climate change. Since this program's inception, it has been adopted by other agencies like City of Everett and Spokane Conservation District.

*DePave*- In collaboration with Stewardship Partners, Pierce Conservation District adopted Portland's DePave model in 2013, which utilizes a community engagement approach to transform pavement into gardens. Since then, more than 500,000 gallons per year of stormwater have been diverted. Through the Stormwater Action Team, this program was shared with Whatcom Conservation District on a commercial business site in a key watershed in Bellingham in 2016.

*Stormwater Monitoring Programs*- Many PSCDs including Whatcom, San Juan, Pierce, Jefferson and Skagit utilize staff and volunteers to monitor water quality parameters of local streams, and installed BMPs. This program has not only been of value across agencies like Department of Health, Department of Ecology, and local jurisdictions, it is a valuable way to engage hundreds of local stewards to be water quality ambassadors within their communities.

*Youth Education Programs* -Youth education is one of the most frequently sought-after Conservation District services by NPDES permittees, and CDs cannot keep up with the demand from local institutions for watershed classes, project-based learning opportunities, STEM, and outdoor classroom designs. Schools represent a high-value cooperator - for their access to numerous youth, parents, teachers, and community members - as well as for their role in meeting equity goals. Current regional efforts include Envirothon, Water on Wheels, Environmental Detectives, and Wheat Week. Several districts have also developed successful local programs, including: Thurston CD's South Sound Green and Snohomish CD's Sound Education program. Collectively, PSCDs serve over 30,000 students per year.

*Urban Forest and Tree Canopy Improvement Program* – Two PSCDs including King and Snohomish have urban forest and tree canopy improvement programs. The King program is the more robust program with stable annual funding that supports

collaboration with local jurisdictions on planning and implementing urban forest health management and tree canopy improvement projects. Projects identified and being coordinated through this program include: conducting tree canopy assessments, preparing stewardship management plans for public right-of-ways and private native growth protection areas; implementing open space restoration plans, planting street trees, working with homeowners adjacent to open spaces areas to identify and control invasive species, and developing code templates to support urban forest and tree canopy cover objectives through stormwater management programs.

### d. Financial Assistance to Cooperators

Conservation Districts utilize a variety of financial incentives to assist landowners in managing stormwater runoff. Financial incentives tools include access to cost-share, grant programs, and special fee reductions with partnering jurisdictions.

#### i. Cost-share Programs

Landowner cost-share is provided by some PSCDs that utilize special assessments or rates and charges. Cost-share programs have evolved in this field – with experience and social marketing research indicating that cash is of less value to homeowners than labor and project management support. To address this barrier, the Kitsap CD has initiated 'Dig Days' to help excavate rain gardens in a targeted area, and Snohomish works with labor providers like EarthCorps and Washington Conservation Corps to provide on-the-ground installation support. District engineers or landscape architects are on-hand to ensure proper implementation and follow through – including the training of landowners in maintenance requirements with support from partners like WSU Extension.

#### ii. Grant Programs

Through their rates and charges funding base, Pierce and King CD provide direct grant funding for other non-profit groups like Stewardship Partners and Adopt-a-Stream, and even jurisdictional partners like City of Bellevue and City of Bothell to implement community-based stormwater projects. PSCDs also provide landowners with extra guidance and support through partner opportunities like City of Seattle and City of Everett's rain garden rebate programs. Lastly, Conservation Districts also mobilize cost-share funding through grants from both the public and private sector – from groups like Department of Ecology, Department of Health, The Nature Conservancy, and Boeing.

#### ii. Stormwater Fee Reductions

A new incentive that is gaining traction among jurisdictions is the reduction of stormwater fees to encourage reductions in impervious areas, or in trade for other services like stormwater education. For example, the City of Edmonds worked with Snohomish Conservation District to work with a local church to retrofit the parking lot into a rain garden. Schools are also working with Conservation Districts to save money by implementing stormwater projects on campuses and within classrooms, to provide win-win solutions for students, school administrators, and local

jurisdictions.

## 6.3 Target Audience Outreach, Education & Information

Conservation Districts take stormwater management out of the theoretical and bring it into real life. The most effective outreach methods are hands-on, applied learning opportunities for both adults and youths, and PSCDs engage in a wide array of demonstration projects and events—including HOA compost parties, stormwater pond maintenance, green street projects, and outdoor classrooms. PSCDs also frequently utilize social media, video, and publications to build awareness towards taking action.

### a. Target Audiences

The impact of urban stormwater and non-point source pollution has greatly increased the scope and audience, and CDs are diligently testing techniques that are effective in encouraging behavior change at a much greater scale. Through social marketing research, CDs know that the average homeowner is not motivated by environmental concerns – and water quality is an especially challenging topic, as many perceive Puget Sound and local water bodies to be clean. However, homeowners are effectively driven by a desire to beautify and improve their property value; community and neighborhood engagement; or issues of personal impact such as flooding of their home or severe erosion.

The experience of PSCDs is that, while there are unique differences among communities, there are similarities between target audiences in our region. Shoreline or streamside homeowners, island residents, landscape professionals, HOAs, developers and real estate professionals are all examples of audiences that can be better targeted with shared outreach resources and collaborative approaches like *Better Ground*.

## 6.4 Program Funding & Resources

### a. Current Funding Model

Only 40% of Puget Sound Conservation Districts receive direct funding for stormwater activities. This support comes from municipalities, Department of Ecology, Department of Health (PIC), and others. Shellfish, salmon recovery, or watershed-specific grants are frequently channeled to partially support stormwater initiatives.

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism to conservation districts in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds can be used to support all aspects of the PSCD Caucus Priority LID/stormwater management program, including technical assistance, outreach and education, and financial incentives program activities conducted to reduce

stormwater runoff and improve associated water quality. Districts able to leverage significant grant funding are frequently those that can use a local system of special assessments or system of rates and charges to meet match requirements. PSCDs that currently have a local system of special assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston Conservation Districts.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding. Grant funding through the Commission includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD LID/stormwater management programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs ranges from $79,625 to $128,893 per district.

- Engineering funds can be used to support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices—many that are NRCS-certified –in association with LID/stormwater programs. This funding supports 3 "cluster" engineers housed at 3 PSCD who provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective "clusters".

**b. Funding Access and Gaps**

Despite a high level of local demand, as well as stormwater expertise among PSCDs (90%) - the amount of services delivered is limited due to a lack in funding. An ideal funding model would provide a basic level of support to individual districts to enhance basic stormwater operation, and targeted funding to sustain the Regional Stormwater Action Team. This Action Team has already shown to be an effective way to raise capacity of other districts and support their local municipalities and NPDES permitees. After an initial investment, both local and regional services are very likely to generate their own funding through contracts and grants.

**c. Two-year Regional Work Plan**

The following Near Term Action (NTA) have been approved by the Puget Sound Partnership for the 2016 Action Agenda. This NTA, written by the Caucus, serves as an unfunded Two-year work plan and budget associated with the PSCD Caucus Priority Regional LID and Stormwater Management Program.

*Puget Sound Conservation District Stormwater Action Team* (NTA 2016-0292)

Raise the capacity of stormwater services in conservation districts and their partners across Puget Sound through the replication of rain garden, S*ound Education*, D*ePave*, and monitoring programs.

*Urban Tree and Forest Canopy Cover Toolkit* (NTA 2016-0343)

Research and develop a toolkit for Puget Sound communities about trees, forest canopy and stormwater so that local staff has increased awareness/resources to implement tree programs which strategically enhance stormwater management and habitat function**.**

# 7.0 Priority Regional Program: Drought & Climate Resiliency

## 7.1 Introduction

Conservation Districts were formed on a national level in response to the Dust Bowl of the 1930s—caused by severe drought and inadequate farming techniques— which brought attention to the need to conserve natural resources, particularly soil. Conservation Districts made huge strides in addressing many of the previous concerns with soil health and water retention, however, with new pressures of climate change, changing precipitation patterns, and increased seasonal drought, renewed efforts are underway. The conservation districts of today are rising to the challenge and incorporating climate actions and drought resiliency in their programming.

Although precipitation varies greatly throughout Puget Sound, consistent throughout the region are dry summers when demand for water is greatest. Furthermore, climate change predictions suggest that the Puget Sound region can expect hotter and drier summers and warmer winters, meaning more runoff and less snowpack. Furthermore, several species of salmonids are listed as Threatened under the Endangered Species Act, and low stream flows are a significant habitat limiting factor. These trends in climate change combined with increasing demands on water resources from a growing population have elevated the importance of drought preparedness and water conservation activities to regional priorities for PSCDs.

## 7.2 Program Information

The Regional Drought and Climate Resiliency Program focuses on the protection of Puget Sound by bringing an increased understanding of the interrelatedness of soil, water, air, plant, animal and energy conservation in resource management planning. PSCDs work with landowners to implement practices like tillage and manure management that, in turn, increase soil health, sequester carbon, and retain moisture to help mitigate impacts of drought.

### a. Spectrum of Drought and Climate Resiliency Programs and Services

#### i. Water Conservation and Drought Resiliency

Seasonal droughts are likely to become more commonplace. Consequently, the need to conserve water is increasing. Districts work with agricultural operators during the planning process to address these issues on a case by case basis. In addition, some districts are addressing this issue on a larger scale. PSCDs offer technical and financial assistance for the implementation of numerous water conservation practices. Examples include:

Drought Conservation Planning**:** San Juan Islands and Whidbey Island Conservation Districts recently completed Drought Conservation Plans that promote adaptation and mitigation strategies to address increasing seasonal droughts.

Irrigation Efficiencies Program**:** Each of the eight Conservation Districts that includes a critical stream flow basin is eligible to participate in the state's Irrigation Efficiencies Program (IEP). This program created by the legislature in 2001, is designed to conserve irrigation water, thus reduce surface water diversions and groundwater withdrawals. However, to date, Clallam Conservation District is the only basin to participate in the program, mainly because of the extensive irrigation water conveyance system and critical importance of irrigation in that District.

Over the past 15 years, Clallam Conservation District has utilized the IEP to help irrigation districts and companies and individual irrigators implement 47 projects. Most of the projects have been piping irrigation ditches. In addition to financial assistance, the District provides engineering and project management assistance, as well as fund-raising assistance. These projects have resulted in over 25 cubic feet per second (cfs) or nearly 8,000 acre-feet of saved water. These water savings account for about 25 percent of typical late summer Dungeness River flows and nearly half the flow during extreme drought years.

Water Storage**:** PSCDs are engaged in water storage projects. These projects involve the capture and storage of wet season runoff and late spring snowmelt. Storage can be in the form of off-stream reservoirs or the shallow aquifer. Water stored in reservoirs is utilized for irrigation in late summer when stream flows are naturally low. Water stored in the shallow aquifer in early summer augments late summer stream flows and offsets groundwater withdrawals, thus enhancing habitat for salmon returning to spawn. Rain water catchment and storage equipment, such as rain barrels and cisterns, are also increasingly popular solutions, especially in the island communities where water resources are scarcer.

Native Plant Sales**:** PSCDs run annual native plant sales that offer species adapted to the Pacific Northwest climate available to the public at low cost. In conjunction with these sales, PSCDs host workshops and festivals to educate and engage the public about natural landscaping, benefits of native plants, and low impact yard care. The annual plant sales and associated events serve as opportunities to connect customers with other CD programs and services and with other community partners in conservation.

Fire Risk Reduction**:** With increased seasonal drought comes increased fire risk. Fire risk reduction is addressed through the *Firewise* program and Forest Health Management programs. Currently, six of the 12 PSCDs are implementing these programs. Examples include the following:

- Skagit Conservation District is implementing Wildfire Mitigation Projects and community wildfire risk assessments.
- San Juan Islands Conservation District is developing incentives for forest health management to reduce fire risk, and providing *Firewise* outreach to communities.

### ii. Climate Resiliency

PSCDs promote techniques to increase soil health and carbon sequestration and to conserve energy through resource management planning with land managers. PSCDs offer technical and financial assistance for the implementation of practices the conserve energy and mitigate impacts of climate change and drought. Examples include:

Soil and Carbon Sequestration**:** Improving soil health sequesters carbon while increasing soil organisms, reducing soil compaction, and improving nutrient storage and cycling. This allows farmers to produce higher crop yields and contributes to mitigation of climate change. Increasing organic matter in the soil using no-till systems and cover crops minimizes soil erosion and nutrient loss, increases water retention of the soil, and removes carbon from the atmosphere.

- Pierce Conservation District has held workshops to share information on carbon sequestration in soil.
- King Conservation District provides direct seed drill and till equipment through a loan program.
- San Juan Islands Conservation District co-sponsored a workshop in 2015 promoting the Soil Carbon Challenge and is currently completing a study on the effects of biochar on soil health and carbon sequestration.

Renewable Energy**:** Promoting renewable energy promotes resiliency and reduces our carbon footprint. Utilizing remote solar and or wind powered electrical power sources for electric fencing and remote watering pumping facilities on farms can save farmers money and create self-contained systems that are easy to manage. Examples include:

- Snohomish, Jefferson, and San Juan Islands Conservation Districts promote and install solar-powered watering facilities.
- San Juan Islands Conservation District implemented the *Community Solar for Schools* program and installed four solar arrays on local schools.
- Pierce Conservation District works with The *Rural Energy for Washington* program, who assists agricultural producers and rural small businesses explore opportunities to install renewable energy systems and upgrade to energy efficient equipment.
- Pierce Conservation District works with non-profit, *Northwest SEED*, to help local farms and businesses generate their own clean energy.

Energy Conservation**:** Pierce and San Juan Islands Conservation Districts are both actively promoting energy conservation and efficiency. Pierce is focused on the agricultural community through the *Rural Energy* program. SJICD is focused more on residential, municipal, and schools through the *Take Charge Campaign* and *Community Solar for Schools* programs.

Outreach Events**:** PSCDs lead and co-sponsor numerous outreach events focused on increasing community understanding of climate change and sustainable energy systems. Some recent events:

- *Years of Living Dangerously*, a 9-part Showtime film series on Climate Change;

- *The Climate Action Imperative*, a series of eight lectures and a finale event on climate impacts, with participation from renowned scientists, business and non-profit advocacy leaders, and elected officials;
- *Decarbonizing Energy Systems*: *Addressing Climate Change Cooperatively*, a presentation by Nobel Prize Winner Dr. Daniel Kammen.

**b. Financial Assistance to Cooperators**

Financial incentives tools make voluntary stewardship activities on private lands possible and inviting to landowners. Conservation Districts utilize a variety of financial incentive tools to assist land and homeowners with planning and implementing water conservation and climate resiliency projects. Financial incentives tools included in the PSCD toolbox include access to cost-share, grant and various tax incentive programs.

Seven of the 12 PSCDs have county-approved local systems of assessment/rates and charges with funding from parcel collections that could be utilized to develop cost-share programs for drought and climate resiliency and the implementation of BMPs to address soil health, water and energy conservation.

## 7.3 Target Audience Outreach, Education & Information

**a. Target Audience**

PSCDs provide technical assistance and outreach to the agricultural community to implement NRCS BMPs that build resiliency in the natural and farming systems. CDs also reach out to the entire community –rural and urban— concerning issues directly related to energy conservation and renewable energy.

**b. Outreach and Education**

**i. Factsheets and Publications**

In addition to materials available on the PSCD Webpage and the *Better Ground* Webpage, the following resources are available:

NRCS provides technical resources for best management practices that conserve energy, decrease carbon output, and promote carbon sequestration. http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg/

Individual PSCDs and the Caucus provide several factsheets and outreach materials on energy efficiency, drought preparedness, and climate resiliency. Some current efforts include the *Take Charge Campaign, Go EV campaign*, *the Green Home Network,* and sustainable landscaping.

**ii. Webpages**

In addition to the *PSCD Caucus* webpage and the *Better Ground* webpage, the following energy and climate focused webpages are available:

- The *Take Charge* website www.takechargesanjuans.org provides information on electric vehicles, how to save energy in your home, and how to decarbonize.
- The *Green Home Network* website www.greenhomesanjuans.org provides information about how to make your home green, promotes Green Home Tours, and provides a forum for homeowners to share ideas.
- San Juan Island Conservation District's website http://sanjuanislandscd.org/ has webpages dedicated to energy and climate.
- Pierce Conservation District's Rural Energy for Washington Program: http://www.piercecountycd.org/373/Renewable-Energy-Efficiency-Assistance

## 7.4 Program Funding & Resources

### a. Current Funding Model

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism to conservation districts in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds support all aspects of the PSCD Caucus Priority Drought and Climate Resiliency Program including outreach, education, technical assistance and cost-share opportunities conducted to improve water management, reduce water consumption, improve energy conservation, etc.

PSCDs that currently have a local system of special assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston.

One PSCD has initiated a partnership with their local electric utility to promote energy conservation and carbon reduction.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding. Grant funding through the Commission funding includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD drought and climate resiliency programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs ranges from $79,625 to $128,893.
- Irrigation Efficiencies (IE) funds can be used to support technical assistance to design, develop and administer water savings projects, write irrigation water management plans, and provide financial incentives – up to 85 percent of total project costs – to landowners willing to install irrigation systems that save water. Currently, one of the12 PSCDs received IE funding in the amount of $49,865. Additional funding may be available to implement IE projects

- Engineering funds can be used to support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices—many that are NRCS-certified – in association with drought and climate resiliency programs. This funding supports three "cluster" engineers housed at 3 PSCD who provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective "clusters".

**b. Funding Access and Gaps**

Cost-share and staffing capacity for planning and implementation of BMPs are the most limiting factor among all the PSCDs. Three districts are on the cutting edge of climate resiliency services for urban and rural landowners, but cannot meet the demand in their own communities, nor share top programming with other districts. The Districts have landowners in the queue and ready to implement natural resource protection and enhancement projects, but individual economic circumstances result in an inability to support the total cost of project implementation. Conservation Districts cannot reach out to these individuals to assist them with implementation even though both parties see the soil health, water conservation and climate resiliency benefits to the public and Puget Sound.

# 8.0 Priority Regional Program: Regional Food Systems

## 8.1 Introduction

Farm economic viability is linked with natural resource stewardship. Good stewardship typically increases as farms improve their profitability. For farms that supply local food systems, particularly through direct marketing, the health of their crops and livestock is important to how they market their products to consumers. Healthy soil and good farm practices are critical to product quality. Sustaining a healthy, regional food economy depends on the ability of farmers and farmland owners to access the tools and resources they need to be sustainable.

The breadth of regional food system issues to address is wide and varied and includes land access, infrastructure costs which limit production, increasing consumer demand, and healthy food access. PSCDs are currently partners and leaders in efforts to strengthen regional food systems. These efforts are driven by the connections made between local food systems, the economic viability of agricultural operations, producer investment in conservation practices, and preservation of working lands.

The PSCDs Regional Food System Program focuses on growing and maintaining a viable food economy by providing resources and information with the goals of: increasing awareness of the direct link between farm economic viability and natural resource stewardship; addressing barriers to sustainable agricultural production; increasing consumer demand for and access to local food products; and participating at the planning level to ensure policies and funding that support more resilient communities.

## 8.2 Program Information

PSCD's Regional Food System Program recognizes the important role that traditional CD services play and seeks to strengthen the overall regional food system. Current programs and services cover a variety of these aspects based on the specific needs within their communities, the expertise of staff, and available resources. Conservation District initiatives to protect and enhance regional food system resources are diverse and responsive to continuing concerns as well as to new, emerging issues.

Three primary objectives of the program are to: (1) determine a baseline of regional food system programming and services within individual districts; (2) develop a strategy for leveraging larger, more comprehensive food system efforts across all PSCDs; and (3) develop a collective measurement system (e.g. dashboard metrics and mapping) that gauge progress on regional food system goals and strategies.

### a. Spectrum of Regional Food System Programs and Services

Some districts have existing programs, while it is a new area of focus for most PSCDs. Currently, Districts provide a diversity of regional food system programs and services, with most focused on farm planning and technical assistance support,

agricultural production as it relates to natural resource stewardship, and infrastructure barriers (primarily addressed through equipment loan programs).

Current programs and services include:

*Educational Workshops and Tours* – PSCD's host workshops and tours to engage small farm operators and others within their districts. Topics are diverse and include, among others, composting, small acreage farming, farm planning/holistic management, and low-impact development. Some districts hold more comprehensive farm expos where a variety of resources and information are presented on farm health and productivity. CDs also offer a variety of hands-on demonstration projects, youth and adult education, Cultivating Success partnerships with WSU Extension, and community partnerships for agricultural sustainability. Urban Agriculture has been a recent area of focus and includes workshops and outreach on a wide variety of topics, including bee keeping, gardening, gleaning, and educating consumers about their farm and food system (Harvest Pierce County).

*Technical Assistance* – CDs provide on-site technical assistance and cost-share incentives on a variety of land stewardship projects that support regional food system goals. Among these are farm conservation planning and implementation, irrigation water management, cover cropping, crop and livestock advice, and noxious weed control.

*Agricultural Drainage* – Assistance is currently limited (King, Whatcom). The goal is to assist landowners with expanding agricultural production by improving field drainage. Programs help landowners maintain drainage ditches, culverts, and tile systems. Improved field drainage increases productivity by extending the growing season, enabling the planting of higher value crops, and expanding grazing for livestock. Improved drainage also provides an opportunity for increased agricultural employment, enhanced local food production, and contributes to the continued growth, vitality, and resilience of local agriculture.

*Soil Testing* – PSCDs offer a range of free or at-cost soil sampling services for both rural and urban landowners. Assistance includes helping landowners properly collect samples, determining appropriate tests for a given area, interpreting results, and making management or amendment recommendations based on testing results. There is a growing demand from urban landowners interested in soil testing that includes lead, other heavy metals, and other contaminants that aren't currently provided.

*Equipment Loan Programs* – Many PSCDs have low-cost or free equipment loan programs that make expensive, or otherwise inaccessible farm resources available to landowners within their districts. These include, for example, small-scale poultry processing equipment, backpack sprayers, manure and lime spreaders, no-till drills, mobile meat processing units, hay and soil probes, electric fencing tools, weed wrenches, and more.

*The South Sound FarmLink Program* – Thurston CD developed this program that works to connect farmers looking for land with farm land owners, and provides access to resources, and technical and financial assistance.

*Identifying Barriers* – Specific initiatives to identify barriers in regional food system development, and opportunities to support food producers are also being explored. Some examples include:

1. **King Conservation District Regional Food System Program: Emphasizing Regional Food Systems in Long-Range Planning.**

   **Identified Barrier:** Dramatic decline in economic production of food in King County and related decline in income among King County Farmers.

   **Solution:** King Conservation District (KCD) and its partners responded to the economic viability of sustainable farm and working lands by organizing a task force to create a coordinated and strategic plan for strengthening regional food security. As part of these efforts, KCD designated Regional Food System & Sustainable Agriculture as a program focus area in their 2015 work plan. Through this program, KCD will coordinate and leverage projects, programs, and services to improve food access, invest in local food systems as an economic growth sector, begin addressing storage and processing obstacles, and strengthen direct market connections. As part of these efforts, the District initiated a Regional Food System Grant Program. A total of $663,878 in competitive grants was awarded in 2015.

2. **Pierce Conservation District: Mobile Slaughter Unit**

   **Identified Barrier:** Meat producers limited by lack of local USDA approved slaughter facilities.

   **Solution:** Pierce Conservation District (PCD) utilized funds from rates and charges to finance a loan for purchase of a mobile slaughter unit. The unit is leased to the Puget Sound Meat Producers Cooperative (PSMPC). This cooperative manages and maintains the unit, and PCD continues to aid the PSMPC in advertising and connecting with producers that exhibit need for the mobile unit.

3. **Whidbey Island Conservation District: Exemplary Partnerships**

   **Identified Barrier:** Whidbey Island Conservation District (WICD) identified several barriers to local food production, such as targeting of local agricultural community for negative environmental impacts, lack of food processing and distribution facilities, and grow need for local food markets.

   **Solution:** WICD developed strategic partnerships with organizations within and beyond their district to fund and implement several events, programs, and services aimed at supporting producer needs when marketing foods locally. These programs include, but are not limited to:

   - Whidbey Island Farm Tour, which is the largest agritourism event on the island. This event began as a showcase of conservation practices and positive environmental impacts made by local food producers. The farm tour evolved into a large community event that successfully promotes both local producers' businesses and conservation practices.

- Partnership with Northwest Agriculture Business Center (NABC) to coordinate local producers for collaborative marketing efforts. The program is based on a Community Supported Agriculture (CSA) model and allows producers to pair their products to meet diverse consumer needs. The program was turned over to producers for management in 2015, and WICD will continue to offer limited support with advertising and coordination.
- Partnerships with several organizations to create a food hub, for storage and distribution of multiple producers' food products within the district. In the interim, WICD is working with organizations outside of the district to connect local food producers with food hub services in Skagit County and throughout the northwest region.
- WICD also recognizes the CD's important role as the entity capable of working one-on-one with producers to provide information and resources to access local markets, but also to ensure conservation practice implementation keeps pace with demands that increased food production places on natural resources. WICD convenes a monthly potluck for farmers where policy decisions, collaborative marketing and educational resources are provided.

**4. San Juan Islands Conservation District**

Working with local organizations such as the SJC ARC (Agricultural Resources Committee), the San Juan Islands Agricultural Guild (AG) and the Northwest Agricultural Business Center (NABC), barriers to local food production, value added and farm product distribution were identified. A grant was initiated to develop the Puget Sound Food hub model and adapt it to an island-wide distribution and aggregation network.

In the interest of improving stewardship and best management practices on local farms, a soil carbon and fertility monitoring program is in the planning stages that will allow local producers to measure the actual results of innovative management practices using newly developed soil test processes. The reduction of costly on-farm inputs that must be brought in via ferry and exchanging them for on-farm practices using no-till seeding, cover crops and green manure crops in pasture – forage based livestock operations is of deep interest in the local agricultural community. The goals are to increase long-term soil fertility; boost subsequent health of the water, plant, animal communities; and thus support the health of farmers and their customers through research based integrated management programs.

**5. Jefferson County Conservation District: Local Collaboration**

Jefferson County Conservation District (JCCD) is member of the *Jefferson County LandWorks Collaborative*, a partnership between JCCD, Jefferson Land Trust, Craft3 Community Lending, the Port Townsend Food Co-op, The Jefferson County Farmers' Market Association, the Jefferson County Washington State University extension. *LandWorks* strives to further a working lands preservation model focused on:

- Preserving agricultural and forest land and keeping that land available, affordable, productive, and profitable over time.
- Providing farmers and foresters access to the business training, capital, and know-how to operate profitably and in an ecologically sustainable manner.
- Ensuring that both consumer demand and robust markets are in place to accommodate the farmer's and forester's needs.

**b. Financial Assistance to Cooperators**

PSCDs utilize a variety of funding sources to deliver regional food system programs and services. These include funds provided through the Washington State Conservation Commission, local assessment or rates and charges, federal, state, and local grants, and community foundations.

Grants and funding through community foundations can play an important role in supporting regional food system objectives. Examples include the Pierce County Agriculture Communities of Interest (AgCOI) initiative, a community-based collaboration actively focused on supporting an economically viable, and environmentally sustainable agricultural community in the Puyallup Watershed and greater Pierce County. The strategy, funded through a grant from The Russell Family Foundation, is led and coordinated by Pierce Conservation District.

In addition to traditional federal grants for conservation activities identified elsewhere in this report, there are a number that fund broader food systems issues. These include the Local Food Promotion Program, Federal State Marketing Improvement Program, and Farmers Market Promotion Program, among others.

A number of districts provide funding to landowners and other community groups to further the goals of natural resource conservation and sustainable agriculture. Examples include King CDs Regional Food System Grant Program and Pierce CDs Green Partnership Fund.

## 8.3 Target Audience Outreach, Education & Information

Outreach and education supporting the regional food economy takes place at several levels within the PSCDs and in collaboration with many community partners (businesses, educational institutions, non-profit organizations).

**a. Target Audiences**

Target audiences vary widely based on context – Rural and urban agriculturalists, individual consumers, food buyers (restaurant, retail, and institution), health professionals, farmers markets, CSA's, educators, community non-profits, and many others.

As it relates to food system work, CDs most typically work with individual landowners, or groups of landowners, to address specific resource issues and needs. This could be through farm planning, agricultural drainage projects, cost-share programs, or equipment loan programs. Within this group, small acreage

landowners represent a growing audience for districts throughout the region.

On a broader level, the San Juan Islands, Snohomish and Whidbey Island CDs engage working landowners and other community members to identify and address issues affecting the food system both within and beyond district boundaries to help farmers develop viable business models through a partnership with NABC. NABC is a cooperative development center for USDA and a state funded business incubation organization. Through interaction and board participation with CD staff members it has been instrumental in helping local farmers develop business plans for expanding agricultural product diversity through value added product development, enterprise business planning and access to the Puget Sound Food Hub for distribution to the greater Seattle metropolitan area.

Another example in San Juan County, is the SJ Islands CD partnership with the County's Agricultural Resources Committee (ARC), the San Juan Islands Agricultural Guild and NABC, regional experts, local food and farm advocates, and other organizations who wish to protect and restore working agricultural lands, in an annual Agriculture Summit.

Other efforts to connect the community with local agriculture and build support for local food systems include farm maps and Harvest Celebration Farm Tours (Mason, Skagit, Jefferson), a variety of regional, educational conferences like the Country Living Expo and Cattlemen's Winter School (Snohomish, Skagit), Focus on Farming (Snohomish), and Women in Agriculture and partnerships with the Northwest Agricultural Business Center (NABC).

## 8.4 Program Funding & Resources

Conservation District services addressing the regional food economy typically lack adequate and consistent funding. Programming is largely piecemeal and lacks a more holistic approach to production, demand, and healthy food access.

**a. Current Funding Model**

The enabling legislation for the Conservation District system (Chapter 89.08 RCW) provides a local funding mechanism to conservation districts in the form of a per parcel system of special assessments or a system of rates and charges. Once approved, these funds can be used to support all aspects of the PSCD Caucus Priority Small Acreage Farms program, including technical assistance, outreach and education, and financial incentives program activities conducted to address livestock and small farm-related water quality and habitat impacts. PSCDs that currently have a local system of assessments/rates and charges are King, Snohomish, San Juan, Whidbey Island, Mason, Pierce, and Thurston Conservation Districts.

The PSCDs have access to Washington State Conservation Commission (Commission) grant program funding to support Small Acreage Farm Programs. Grant funding through the Commission includes the following:

- Annual Implementation (IM) funds can be used to fund most aspects of PSCD

farm management programs and services including, technical assistance, cost-share for BMPs, education and outreach, administrative costs, etc. Annual IM funding for PSCDs ranges from $79,625 to $128,893.

- Engineering funds can be used to support Conservation District professional engineers (PE) and engineering technicians who plan, design, and coordinate construction of conservation practices—many that are NRCS-certified –in association with PSCD regional food systems programs. This funding supports 3 "cluster" engineers housed at 3 PSCD and who provide engineering support to all 12 PSCDs. Host PSCDs receive engineering funding in the amount of $75,000 to support engineering services through their respective "clusters".

- Livestock Technical Assistance funds support all aspects of TA to landowners with livestock, including: site visits, farm planning, classes and workshops, development of outreach and education materials, and more. Currently, 11 of 12 PSCDs receive Livestock TA funding with amounts ranging from $1,000 to $201,028.

**b. Funding Access and Gaps**

- An ideal funding model would provide a basic level of support to individual districts to provide food system programming consistent across districts, and targeted funding to leverage regional efforts.
- Across the PSCDs, there are a number of food system-related programs and services for which districts have a hard time securing funding. Some of these include:
- Access to equipment through loan programs for small- and medium-sized farms to enable new land management scenarios and practices driven by university research (e.g. crimper-roller, no-till drill).
- Water and drought conservation efforts, including irrigation management; and water collection, storage, and re-use.
- Agricultural drainage, including maintaining drainage ditches, culverts, and tile systems.
- Supported manure share and other nutrient management systems.
- Technical Assistance for small scale crop producers.
- Good Agricultural Practices (GAPs) education and training.
- Policy level advocacy for food system regulations.
- Buy direct and local consumer education messaging and outreach.
- Farmer-Buyer trade meetings to build new marketing opportunities.

**c. Two-year Regional Work Plan**

The following Near Term Actions (NTAs) have been approved by the Puget Sound Partnership for the 2016 Action Agenda. These NTAs, written by the Washington State Conservation Commission, serves as an unfunded Two-year work plans and budget associated with the PSCD Caucus Priority Regional Food Systems Program.

*Retention of Agricultural Lands at Risk of Conversion in Puget Sound* (NTA 2016-0371)

Identify the projected risk of agricultural land conversion to non-agricultural uses using the Washington State Parcel Database developed by the University of Washington School of Environmental and Forest Sciences.

*Monetizing Stewardship of Dairy Manure* (NTA 2016-0244)

Determine conditions for a viable market for products derived from dairy manure produced in the Nooksack and Skagit watersheds to incentivize manure management practices that reduce their adverse impact on critical shellfish beds.

# 9.0 Discussion & Conclusions

The PSCDs are strategically addressing local and regional natural resource conservation priorities through a suite of natural resource management programs and services collectively referred to as the *PSCD Portfolio of Priority Regional Programs and Services* (Portfolio). The priority programs and services included in the Portfolio focus on increasing Puget Sound landowner and resident literacy about natural resource stewardship strategies and practices, and increasing the amount of and accelerating the rate of adoption of natural resource management practices. PSCDs facilitate this effort by distributing educational materials, facilitating educational opportunities, providing land management and resource conservation technical services, and connecting landowners to financial assistance that supports on-the-ground implementation of Best Management Practices (BMPs). Primary BMPs addressed through the priority programs and services include protection and enhancement of water quality, soils, and fish and wildlife habitat.

This document outlining the PSCD regional priority programs is one of four project components in an initiative undertaken by the PSCD Caucus to advance the six PSCD priority regional natural resource management programs – Small Acreage Farm Management, Forest Health Management, Shorelines and Riparian Habitat Protection and Enhancement, LID and Other Stormwater Management Services, Drought and Climate Change Resiliency, and Regional Food System Program. Next steps involved in implementing the PSCD Caucus initiative to advance these priority regional natural resource management programs include:

- Completing a marketing tool kit to advance PSCD regional priority programs with stakeholders and other partners engaged in restoring the health of Puget Sound;
- Completing the Better Ground webpage, a comprehensive web-based outreach and education resource to engage Puget Sound landowners and residents in recovering the health of Puget Sound;
- Developing a web-based portal for use by the PSCDs to share priority program resources, tools, materials, etc. with the purpose of developing and supporting a stronger PSCD regional programs and services delivery system.
- Completing effectiveness monitoring guidelines, and a region-wide performance metrics system and collective impact report to funders and partners.

The programs and services included in the Portfolio address local needs within the boundary of each PSCD while collectively benefiting the entire Puget Sound region. Collaboration through the PSCD Caucus promotes regional deployment of priority natural resource management scopes of work upon which regional partners can rely.

# Appendix A – REGIONAL NATURAL RESOURCE MANAGEMENT PRIORITES OF PSCDs

- Soil
    - Conservation
    - Health and fertility
    - Productivity in forage and crops
    - Erosion and sedimentation in stream and wetlands
- Water
    - Protection and enhancement of quality
    - Conservation of quantity
    - Water rights
    - Managing for runoff (stormwater, surface water, agricultural)
    - Flooding and ponding
    - Pathogens and fecal coliforms
    - Wetland degradation
    - Septic Issues
- Habitat
    - Shellfish bed health
    - Salmon recovery
    - Habitat loss
    - Forest health
    - Watershed-scale ecosystem health
    - Road construction
    - Climate change and mitigation
- Forests
    - Stewardship and forest health management
    - Urban forests / open space conditions & loss
    - Fire prevention
- Socio-economic, political and cultural priorities
    - Economic stability of commercial and non-commercial agricultural producers
    - Economic stability of shellfish and fisheries industries
    - Loss of farmland
    - Loss of forested lands
    - Community sense of place and voluntary stewardship
    - Neighbor-to-neighbor interaction/complaints (water, weeds, odor)
    - Critical areas regulations
    - Emergency response and preparedness
- Pollution, degradation, and fragmentation
    - Use and impacts of pesticides
    - Management of excess nutrients
    - Impacts and effective management of noxious weeds
    - Septic issues

# Appendix B – Listing of PSCD Programs & Services

### Clallam Conservation District

- *Conservation around the House* (Water and energy conservation, natural landscaping, composting, rainwater harvesting, recycling, household hazardous waste disposal, etc.)
- *Conservation on the Farm* (Farm conservation planning, mud and manure management, noxious weed control, irrigation water management, farmland preservation, etc.)
- *Conservation in the Woods* (Forestland conservation planning, noxious weed control, forest road maintenance and abandonment, culvert replacement, forestland preservation, etc.)
- *Conservation along the Creek* (Stream and wetland enhancement & protection, CREP, bank stabilization, Dungeness Irrigation Water Conservation, salmon recovery projects, stream flows, etc.)
- *Conservation around Town* (Low Impact Development, storm-water management, Sequim Community Organic Gardens, Clallam Transit, Buy Local, etc.)
- *Conservation by the Bay* (Shoreline stabilization, living near bluffs, County Shoreline Master Program, tide and tsunami information, etc.)
- *Technical Assistance*. District staff is available to provide free, no-obligation site visits and information on a variety of conservation and land management topics like native plantings, composting, livestock keeping, etc.
- *Financial Assistance* (The District manages a cost-sharing program to help landowners install practices on their land that protect water quality)
- *Soil Testing* (Low-cost soil testing program provides you with fertilizer recommendations for your crops)
- *Workshops* (small acreage, forest, natural resource management)
- *Manure Share* (This program connects people who have extra livestock manure with people who want manure for their gardening endeavors)
- Native plant sale

### Jefferson Conservation District

- Agriculture
    - Coached Farm Planning
    - Cost-share programs for improved efficiencies and resource protection
    - CREP Program – buffer planting, livestock exclusion fencing, solar-powered off-channel watering facilities
- Backyard conservation and habitat assistance
- Small Forests
    - Forest health management
    - Public notification of aerial spraying for timber companies
- Source-water protection
    - Water quality and salmon monitoring

    - Riparian protection and enhancement projects
    - Agricultural improvements for efficiencies and resource protection
    - Chimacum Drainage Management
    - LID and Stormwater Management
- Workshops, trainings, and education
    - Noxious weed identification and management
    - Native plant gardening and care
    - Pasture management
    - Mud and manure management
    - Home composting
    - Soils 101
    - Watershed water quality updates
- Native plant sale
- Soil testing program
- Tool share program
- Critical Areas update planning assistance
- Community partnerships for watershed protection, agricultural sustainability, and salmon protection

**King Conservation District**

- Rural Agricultural Services
    - Farm Management Planning Services (dairy/small acreage/beef/crop)
    - Tool Rental Program (e.g., poultry processing equipment, no-till drill, manure spreader, soil probes, hay probe, lime spreader)
    - Landowner liaison for permitting Agricultural structures
    - Work with Agencies to streamline Permitting for agricultural operations
    - Work with Agencies in King County to help make it easier for farmers
    - ADAP (Agricultural Drainage Assistance Program)
    - Manure share program
    - Direct landowners to other cost share programs (State & County)
- Urban Agricultural Services
    - Farm Friendly Cities
    - Food growing in low-income communities
    - Jurisdictional assistance with Comprehensive Code and Regulatory Code audits
- Regional Food Program
    - Regional Food System Grant Program
    - Local Institutional Food Team
    - Infrastructure Mapping Tool
- Urban and Rural Landowner Soil testing program
- Forestry Health Management
    - Rural and small lot forest health management planning
    - Urban street trees, tree canopy cover, and green infrastructure
- Aquatic Area and Upland Enhancement Services
    - Freshwater riparian habitat technical assistance and enhancement projects

    - Marine bluff, beach and estuarine technical assistance and enhancement projects
    - CREP (Conservation Reserve Enhancement Program)
    - Backyard wildlife habitat technical assistance and enhancement projects
    - Tool Rental Program (e.g., weed wrench)
- Engineering services (Ag practices, Fish habitat, etc.)
- Landowner Incentive Program (cost share program to support implementation of natural resource management practices)
- Education and Learning Opportunities
    - Youth Education (Envirothon, K-12 Field Days)
    - Adult Education (workshops, farm tours, classes, seminars)
- Volunteer program providing service learning and community support opportunities (projects are rural & urban habitat projects, office work, native plant nursery)
- Native plant sale

**Kitsap Conservation District**

- Agricultural technical assistance
    - Water quality enhancement and improvement
    - Farm conservation design plans
    - Pasture management
    - Livestock manure management
    - Soil erosion reduction
    - Stream bank restoration and protection
    - Rain garden water infiltration techniques
    - Wildlife habitat enhancement
- Backyard habitat program
    - Riparian/stream restoration and clean up
    - Fish blockages
    - Noxious weeds
    - Cost share
- Rain garden and LID programs
    - Storm water
    - Habitat
    - Water quality/quantity
    - Enhancement
- Native plant sale

**Mason Conservation District**

- Conservation Planning Services
- Small farm (livestock, commercial, crop, drainage)
- Green Stormwater Infrastructure / Low Impact Development program / Stormwater management program
- Licensed Professional Engineering services

- Project Development, Landscape Architecture services, and Engineering Design
- Construction management & surveying services for restoration projects
- Shoreline management and restoration.
- Freshwater and Marine Aquatic Area Program
- Habitat conservation and restoration
- Backyard habitat planning
- Noxious weed control program (Knotweed)
- Adult and Youth education and targeted outreach
- Native plant sale
- Tool Rental Program (e.g., Poultry Processing Equipment)
- Manure share program
- Assessments - Surveys
- Conservation Crew

**Pierce Conservation District**

- Small farm planning
- Education/workshops/farm tours
    - small acreage
    - shellfish
    - newsletter
- Sustainable agriculture/community gardens
- Stream team
- Tool rental program (manure spreader, poultry processing equipment)
- Mobile meat processing unit
- Engineering services
- Knotweed eradication program
- Green Partnership Fund (cost share)
- Native plant sale

**San Juan Island Conservation District**

- Farm Planning
- Forest Planning
- Sustainable Land Use Practices
- Low Impact Development Technical Assistance
- Water Quality & Watershed Awareness
- Native Plant Use & Wildlife Habitat Preservation
- Native plant sale

**Skagit Conservation District**

- Small farm/dairy nut mgmt.
- Forest stewardship
- CREP
- Riparian restoration
- Education
    - Backyard conservation
    - Watershed masters
    - Stream team
    - Marine bio-toxin program
    - Stormwater education
    - Firewise
    - Youth education/Envirothon
    - Workshops/newsletters
    - NPDES
- Clean Sammamish initiative
- Engineering services
- Native plant sale

**Snohomish Conservation District**

- Farm planning (dairy/small acreage/ beef/crop)
- Sustainable agriculture (urban/suburban/school/commercial and non-commercial)
- Education
    - farm best management practices
    - septics/shellfish recovery
    - sustainable agriculture
    - backyard conservation/wildlife
    - habitat/restoration
    - forestry
    - Cultivating Success program (with WSU)
    - Social media (Facebook, Better Ground, “mug ups and meet ups”, videos)
    - Envirothon
    - In-school youth education
    - Newsletter
- Research partnerships (WSU compost trials)
- Manure share
- Small acreage equipment program (manure spreaders, broadcast spreaders)
- Soil testing/forage testing program
- Engineering services (farming, urban/suburban/cluster with 3 other Districts)
- Low Impact Development (storm-water/rain-gardens)
- CREP
- Habitat restoration
- Firewise

- Water quality monitoring
- Native plant sale

**Thurston Conservation District**

- Farm Technical Assistance (small farm to commercial)
    - Conservation Planning
    - Soil testing
    - Manure management
    - Cost Share
    - Equipment Rental Program
    - South Sound FarmLink
    - Addressing climate change/sea level rise
    - Improving pollinator habitat
    - Addressing endangered species
    - Coordinating with regulatory agencies/permitting
- Urban Technical Assistance
    - Low Impact Development/Green Stormwater Infrastructure
    - Clear Choices for Clean Water Incentive Program
    - Improving pollinator habitat
    - Addressing climate change/sea level rise
    - Soil testing
    - Backyard habitat
- Habitat Restoration and Protection
    - Conservation Reserve Enhancement Program (CREP)
    - Salmon Recovery
    - Shoreline Management
    - Planting Planning
    - Wildlife and Pollinator Planning
    - Addressing climate change/sea level rise
    - Improving pollinator habitat
- Education/Outreach
    - South Sound GREEN (student education)
    - Workshops & Tours
    - Annual Plant Sale Festival

**Whatcom Conservation District**

- CREP
- Commercial livestock (dairy/beef)
- Research
- Engineering
- Research
- Some small acreage services (Carol Creek-Birch bay)

- Crop planning services
- Firewise, LID trained staff but no program
- lots of walk in work (crop production) TA
- Drainage improvements/hedgerows (herbicide drift mitigation)
- Native plant sale

**Whidbey Island Conservation District**

- Small farm (livestock, commercial, crop, drainage)
- LID (rain gardens)
- Annual farm tours
- Education
- Drainage issues on farms
- Manure mgmt. within specific watersheds (EcoNET grant)
- Firewise
- Forestry, forest stewardship, forest planning
- Engineering services
- Shoreline mgmt.
- Backyard habitat
- Youth education-science Olympiad
- CSA program
- Outreach and education (see above)
- Native plant sale

# Appendix C – Listing of PSCD Technical & Professional Staff

### Clallam Conservation District

- District Manager, Landscape Architecture, Permaculture, Adult Education
- Administrative Assistant
- Conservation Planner, Certified Farm Planner, CREP Specialist
- Conservation Planner, Certified Farm Planner

### Jefferson Conservation District

- District Manager, Environmental Restoration, Native Plant Propagation, Volunteer Management
- Fisheries and Water Quality Specialist
- Forestry and CREP Specialist
- Conservation Planner and Soil Scientist
- Office and Finance Manager

### King Conservation District

- Executive Director
- Director of Operations, Human Resources, and Public Relations
- Community Engagement Manager
- Outreach Coordinator
- Program Director, Food and Farm Programs
- Interagency Director, Implementation and Education Programs Manager
- Program Assistant, Planning and Sub-Basin Targeted Outreach Program
- Project Assistant II
- Accountant
- Grant Program Manager, Member Jurisdiction and WRIA Forum Grant Programs
- Grant Program Manager, Regional Food Systems
- Senior Program Specialist, CREP and Education Programs
- Senior Resource Specialist, Aquatic Area Enhancement Projects, Bare Root Plant Sale
- Senior Resource Specialist, Certified Farm Planner, Farm Management Services
- Resource Specialist II, Aquatic Area Enhancement Projects, Native Plant Nursery
- Resource Specialist II, Aquatic Areas Enhancement Projects
- Resource Specialist I, Certified Farm Planner, Dairy Planner, and Certified Professional Wetland Scientist
- Resource Specialist I, Certified Farm Planner & Urban Agriculture
- Resource Specialist I, Certified Farm Planner
- Project Coordinator, IP Forestry
- Project Coordinator, Operations
- Program Coordinator and Resource Planner, Rural Forest Health Management

- Program Coordinator, Agricultural Drainage
- Program Coordinator, K-12 Program
- LID Cost-share Lead
- Volunteer Program Coordinator
- AmeriCorps/Washington Conservation Corps IP, Education Intern
- AmeriCorps/Washington Conservation Corps IP, Habitat Restoration Project Coordinator

**Kitsap Conservation District**

- Coordinator
- Technical/Financial Coordinator
- Resource Planner
- Stream Stewards Program Manager,
- Resource Planner/Soil Science
- Resource Planner, LID Specialist
- LID/Landscape Architect
- Administrative Assistant
- Rain Garden Program Manager/Resource Planner
- LID/Resource Planner

**Mason Conservation District**

- District Manager
- Financial Accountant
- Community Engagement Coordinator
- Small Farms Coordinator
- Habitat Program Manager
- WRIA 14 Lead Entity and Watershed Coordinator
- Professional Engineer
- Engineer In Training
- Engineering Technician x4
- Auto CAD Technician x2
- GIS Technician x2
- Environmental Specialist, LID and Stormwater
- Environmental Specialist
- Natural Resource Planner, Certified Farm Planner
- Natural Resource Technician, CREP Specialist
- Resource Technician, Water Quality

**Pierce Conservation District**

- Executive Director

- Technician/Grant Administrator
- Financial Administrator
- Fund Development Director
- Urban Conservation Program Coordinator
- Share the Harvest Program Coordinator
- Farm Resource Specialist, Certified Farm Planner
- Small Farm Planner, Certified Farm Planner
- Ag Roundtable Coordinator
- Stream Team Coordinator
- Stream Team Technician
- Community Garden Coordinator
- Gleaning Program Coordinator
- Knotweed Control Program Manager
- Water Quality Coordinator

**San Juan Islands Conservation District**

- Executive Director
- Financial & Administrative Manager Elections, Financial and Public Records Officer
- Natural Resources Planner, Certified Farm Planner
- Certified Farm Planner
- Education and Outreach Specialist
- Water Quality Technician
- LID and Stormwater Specialist
- Engineer

**Skagit Conservation District**

- District Manager
- Certified Forester
- Certified Farm Planner x4
- Natural Resource Specialist x5
- Engineer
- Education and Outreach Specialist x3
- CREP Specialist x3
- Water Quality Technician x2
- LID and Stormwater Specialist
- Firewise Coordinator
- Volunteer Specialist x2

**Snohomish Conservation District**

- District Manager
- Grants Administrator

- Administrative Assistant
- Lead  Certified Farm planner
- Certified Farm Planner x4
- Resource Planner
- Civil Engineer, experience with Forest Service/NRCS
- Civil Engineer, LID specialist
- LID Specialist
- LID Community Coordinator
- Information/Education Coordinator,
- Education/Social Media Specialist,
- Youth Education Coordinator
- Outreach Assistant,
- Habitat Restoration Specialist x3
- Water Quality Specialist
- Landscape Architect
- Stormwater Engineer

**Thurston Conservation District**

- Executive Director
- Accountant
- Administrative Assistant
- CREP Coordinator
- Environmental Program Manager
- Habitat Coordinator
- Lead Entity Coordinator
- South Sound GREEN Coordinator
- South Sound GREEN AmeriCorps Volunteer
- AmeriCorps Environmental Stewardship & Outreach Coordinator
- Agricultural Outreach Specialist
- Education and Outreach Assistant
- Resource Specialist, Certified Farm Planner
- Resource Specialist, Certified Nutrient Management Planner
- Certified Crop Advisors

**Whatcom Conservation District**

- District Manager
- Administrative Assistant
- Resource Technician (CREP/Livestock) Certified Farm Planner
- Natural Resource Specialist (CREP)
- Resource Specialist (Livestock) Certified Farm Planner
- Resource Coordinator – Sustainable Livestock Production Program

- Resource Coordinator (Riparian Restoration)
- Natural Resource Specialist
- Natural Resource Specialist
- Livestock Planning Technician
- GIS Technician/Cartographer/IT Admin.

**Whidbey Island Conservation District**

- District Manager
- Office Administrator
- Natural Resource Planner, Certified Farm Planner
- Public Outreach and Resource Planner, Certified Farm Planner
- Farm and Forest Planner, Certified Farm Planner
- Certified Farm Planner

# Appendix D – PSCD Regional Near-Term Actions

The following Regional NTA's –put forth by the PSCD Caucus and the Washington State Conservation Commission –represent unfunded Two-year work plans with budgets for the PSCD Caucus' Priority Regional Programs and Services.

The details of these work plans can be found by visiting the following link: https://pspwa.app.box.com/s/kaehyslz1kdtfh954erci12uidop6o24

**Better Ground** (NTA 2016-0246)

Increase impact at the local level by providing urban and rural residents with website and outreach tools to implement best management practices on private property.

**Conservation Reserve Enhancement Program Expansion** (NTA 2016-0073)

Expand the Conservation Reserve Enhancement Program statewide by completing an assessment of rivers and streams to guide future grants, identify landowner motivations to increase participation, identify additional funds required for incentives, and conduct a pilot project.

**Expand Conservation District Shoreline Technical Assistance in Puget Sound** (NTA 2016-0268)

Establish a network of conservation district programs to collaborate with shoreline landowners and promote naturally functioning marine shorelines using outreach, technical assistance, site assessments, design, and cost-share for restoration and protection projects.

**Forest Health Management for Reduced Stormwater Runoff & Land Conversion** (NTA 2016-0332)

Perform GIS mapping to identify and prioritize forestlands for preservation and restoration. Target forest health management services to reduce or prevent conversion, reduce stormwater runoff, and protect and improve water quality.

**Monetizing Stewardship of Dairy Manure** (NTA 2016-0244)

Determine conditions for a viable market for products derived from dairy manure produced in the Nooksack and Skagit watersheds to incentivize manure management practices that reduce their adverse impact on critical shellfish beds.

**Puget Sound Clean Waters Livestock Stewardship Program** (NTA 2016-0370)

Provide enhanced educational opportunities, technical assistance, and conservation planning tools, project designs, and financial assistance to livestock owners to prevent fecal coliform pollution.

**Puget Sound Conservation District Stormwater Action Team** (NTA 2016-0292)

Raise the capacity of stormwater services in conservation districts and their partners across Puget Sound through the replication of rain garden, sound education, *DePave*, and monitoring programs.

**Puget Sound Water Quality Trading Market Proof of Concept** (NTA 2016-0404)

Build upon the Dept. of Ecology report on conservation markets and explore whether there are adequate buyers and sellers in Puget Sound watersheds for the potential implementation of a water quality trading program. Serve as a proof of concept for how to achieve Puget Sound recovery through an incentives approach.

**Retention of Agricultural Lands at Risk of Conversion in Puget Sound** (NTA 2016-0371)

Identify the projected risk of agricultural land conversion to nonagricultural uses using the Washington State Parcel Database developed by the University of Washington School of Environmental and Forest Sciences.

**Riparian Restoration throughout the Greater Puget Sound** (NTA 2016-0270)

Expand on efforts to restore and protect naturally functioning riparian and floodplain areas by conducting planting, site maintenance, knotweed inventory, and control. Develop a unified riparian implementation tracking tool.

**Urban Tree & Forest Canopy Cover Toolkit** (NTA 2016-0343)

Research and develop a toolkit for Puget Sound communities about trees, forest canopy and stormwater so that local staff has increased awareness/resources to implement tree programs which strategically enhance stormwater management and habitat function**.**