5-Year Plan (2021 to 2025) Palouse-Rock Lake Conservation District

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Organization of the Palouse-Rock Lake Conservation District

A political subdivision of the State of Washington – authorities, powers and structure contained in RCW 89.08.

Incorporated in 1942, The Palouse-Rock Lake Conservation District exists to provide technical and financial assistance for conserving natural resources in its district boundary.

Function of the Palouse-Rock Lake Conservation District

To make available technical, financial and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local landowners, managers and users with conservation of soil, water and other related natural resources.

Mission of the Palouse-Rock Lake Conservation District

 To serve landowners and land users by providing financial and technical assistance to encourage and implement sustainable management practices that preserve and enhance natural resources for present and future generations.

Vision of the Palouse-Rock Lake Conservation District

To exist in the minds of those we serve as the preeminent local resource for implementing their natural resource conservation needs and desires; that to become this we must relentlessly pursue additional and diverse funding and we must implement our work with timeliness, effectiveness, and unparalleled quality.

Values of the Palouse- Rock Lake Conservation District

- Service-- to land and land user alike
- Humility
- Accountability
- Transparency
- Impartiality of Services
- Protecting and improving natural resources; soil, water, air, plants, animals and humans
- Environmental Sustainability
- Economic Sustainability
- Education
- Respect for the rights of landowners, managers and users
- Openness toward new practices and technologies

Natural Resource Priorities, Measures of Success and Goals:

• Soil Health: Improve soil health by implementing an additional 13,500 (18 participants at 250/a each for 3 years) acres of conservation tillage practices, 7,500 acres of cover cropping (10 participants at 250/a each for 3 years. Push the narrative of soil health and soil building and promote practices that encourage these (composts, soil amendments, residues, no-till, liming, cover crops etc.)

- Water Quality: Improve water quality by implementing 5 additional miles of riparian forest buffers. Additionally, water quality will be spared of approximately 567,000 tons of sediment through reduced non-point source pollutants/erosion from the already mentioned 13,500 acres of conservation tillage and 7,500 acres of cover cropping (this based on a 27 ton/A average reduction in erosion of direct-seed systems.)
- Air Quality: Reduce diesel fuel consumption by 147,000 gallons (this based on a 7gal/A average reduction in direct-seed systems) to accomplish a reduction in CO2 e of 1,487 metric tons (this based on a 22.3lb/gal reduction in CO2 e. An additional reduction of 4,200 metric tons of CO2 e gases is expected through soil stored carbon sequestration (this based on a .2 mT/A CO2 e reduction rate.)
- **Habitat:** Install 5 miles of riparian forest buffer AND otherwise enhance an additional 5 miles of riparian area or stream bank.

Critical Geographic Areas:

- Western PRLCD- Rock Creek etc., especially cultural resources
- Green Hollow- 2020 burn zone
- Rebel Flat Creek- cut banks, water quality concerns
- Downing Creek- cut banks, water quality concerns
- Palouse River Valley- Riparian zones and water quality
- Riparian Zones
- Highly Erodable Lands- specifically farmed hillsides

Information – Education Priorities, Measures of Success, and Goals:

Priorities

- 1. Expand PRLCD footprint- increase marketing such that landowners and users are more aware of educational opportunities and resources PRLCD has to offer.
- 2. Improve web presence and available resource material at prlcd.org.
- 3. Continue workshop/conservation outreach at the Endicott Community Garden.
- 4. Engage local school districts to develop student learning opportunities.

Measures of Success

- 1. If successful in its effort to expand its market and educational footprint, PRLCD should see an increase of landowner/land-user contacts beyond its current total which has been relatively stagnant around 400. By end of FY 2025 PRLCD aims to increase contacts by around 25% to 500.
- 2. An Improved web presence will be measured by 1) no less than monthly updates to pricd.org 2) Increased social media presence and engagements 3) a robust resource material section at pricd.org for present and would-be conservationists.
- 3. No fewer than two workshops will be conducted each year at the Endicott Community Garden.
- 4. Aim to conduct at least one annual learning event in collaboration with local school districts.

District Operations Priorities Measures of Success, and Goals:

By January 2025 PRLCD will have effectively and efficiently conducted it's critical operations including; accounting, grant vouchers, personnel management, supervisor elections & appointments, training & development and annual planning and reporting.

The measure(s) for success will include:

- Every grant administered to the satisfaction of the funding organization.
- Transparent and monthly maintenance of every fund via Smartsheet.
- Successful completion of any scheduled or unscheduled audits.
- Successful and timely election of all vacant supervisor positions.
- Successful and timely training of staff when necessary (e.g. IT training, HR training, professional/conservation training)

Trends Impacting Conservation in the Palouse-Rock Lake Conservation District

- Herbicide resistances
- Decreasing soil pH
- Uncertainty in funding
- Non-point source pollution
- Burdensome regulatory bureaucracies

Strategies, Services & Products to Address Trends

Herbicide resistances

- 1) Increase awareness at events through hosting knowledgeable and respected speakers on the subject.
- 2) Pursue cover cropping as a potential mitigating practice; partner with ag researchers to address this hypothesis with a methodological approach.
- Decreasing soil pH
 - 1) Promote mitigating strategies; cover crops, lime/CaCo2, alternative fertilization methods.
- Uncertainty in USDA programs
 - 1) Establish a marked presence with local work groups, especially FSA and NRCS to lobby for desired funding.
 - 2) Vocalize program/funding concerns formally to WSCC representative(s).
 - 3) Vocalize program/funding concerns formally to WACD.
 - 4) Vocalize program/funding concerns formally to NACD.
- Non-point source pollution
 - 1) Encourage and incentivize adoption of precision application technologies.
 - 2) Encourage and incentivize reduced tillage practices and no-till.
 - 3) Develop a network of available custom-seeders/drill-owners willing for hire.
 - 4) Encourage, incentivize and implement stream buffers of all sorts; riparian forest buffers, commodity buffers, grass buffers, filter strips etc.
 - 5) Increase small willow specie plantings in riparian zones.
- Burdensome regulatory bureaucracies
 - 1) Press WACD and NACD to lobby respective lawmakers to reduce regulatory obstacles to conservation practices.

Natural Resource Data:

Palouse-Rock Lake Conservation District occupies 378,701 acres, most of which are arable and farmed annually. PRLCD rests near the center of WRIA 34, the Palouse Watershed and is therefore party to the Palouse-Watershed Plan https://c43a4e0f-8774-41c1-a272

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The Palouse Watershed encompasses approximately 1,755,000 acres in WA State as well as 340,000 acres of western Idaho. The primary feature of the watershed, the Palouse River (which includes 398 miles of streams and tributaries), bears southwesterly through the heart of the Palouse-Rock Lake Conservation District. At it's winter highs the river flows at approximately 1800 cfs and during the summer flows drop to around 300 cfs. Despite its confluence with the Snake River, the Palouse River does not bear anadromous species due to the 185ft Palouse Falls in Franklin County nor is the river known to bear any ESA listed aquatic species about Palouse Falls. In the PRLCD reach, the river is dominated by only a select few fish species including the native chisel-mouth sucker and northern pike minnow and the non-native small mouth bass and channel catfish. Other present species include bluegill, largemouth bass and crappie.

PRLCD straddles a divergent zone dominated by two basic landscape types; channeled scablands in the western region and vast rolling hills of deep silt-loam in the eastern portion; respectively the western region

receives 10-12 inches of annual precipitation while the eastern portion receives 16-20. These basic landscapes are also roughly equivalent to the two subbasins of PRLCD; Cow Creek/Rock Creek and the cental/lower Palouse subbasins. The western Cow Creek/Rock Creek subbasin is pocked with 42 pothole lakes, 23 occurring in PRLCD with Rock Lake and Bonnie Lake being the most prominent. Both lakes are fed by Rock Creek, the district's second largest stream next to the Palouse River.

Rock creek is a small stream flowing to and from Rock Lake at approximately 250 cfs at the height of the winter months to around 10 cfs in the deep summer. Additionally, Rock Creek was listed on the state's 1998 list of 303(d) water bodies for exceeding state standards for temp and PH but is not listed in the 2002-2004 lists.

Rock Lake is Eastern Washington's largest natural lake encompassing an area of 2189 acres spanning some 7 miles in length as it flows southwesterly through a deep basalt coulee. The lake is home to many fish species including rainbow trout, brown trout, large and small mouth bass, common carp, channel catfish, crappie, bluegill, pumpkinseed sunfish, grass pickerel, largescale suckerfish and yellow perch. Rock Lake is also home to some notable avian species including bald eagles, peregrine falcons, blue heron and turkey vultures.

PRLCD also occupies part of the central/lower Palouse subbasin. Within this subbasin there are additional 303(d) waterbodies including 1) Rebel Flat Creek for dissolved oxygen and fecal coliforms and 2) the Palouse River for dissolved oxygen, fecal coliforms, pH, temperature, heptachlor expoxide, PCBs, 4,4'-DDE and dieldrin. Many of these contaminants are present due to the result of soil erosion. Within the entirety of the Palouse Watershed it is estimated that up to 40% of Palouse top soils have been lost since the advent of agriculture in the area beginning in the 1870's and 1880's.

PRLCD serves 3 incorporated communities: St. John (pop. 564), Endicott (pop. 308) and Lamont (pop. 76). The district also serves the unincorporated communities of Winona, Ewan, Diamond and the southwest quadrant of the town of Steptoe. Municipal water demands are not expected to increase in any significant manner.

Staffing Needs

- 1 FTE District Manager
- 1 FTE Financial Manager/Officer
- 1 FTE Resource Technician- Field Lead
- 1 FTE Resource Conservationist
- 2-3 PTE seasonal field workers
- 1 Contracted Environmental Engineer
- 1 Contracted Archaeologist

Annual Budget Needs

Staff Position	Employment Type	Wage/Salary	Benefits	Total Annual Cost
Wages and Benefits				
District Manager	FTE	\$25.00	\$15.58	\$84,406.40
Financial Manager	FTE	\$24.10	\$15.03	\$81,390.40
Resource Tech- Field Lead	FTE	\$22.00	\$11.76	\$70,220.80
Resource Conservationist	FTE	\$22.00	\$11.76	\$70,220.80
Seasonal worker 1	PT	\$15.00	\$0.00	\$12,000.00
Seasonal worker 2	PT	\$15.00	\$0.00	\$12,000.00
Employee Retirement	NA	NA	. NA	\$4,200.00
			Total	\$334,438.40

Building, Operations and Cost-Share

Utilities	NA	NA	NA	\$4,400.00
Communication	NA	NA	NA	\$1,200.00
Insurance	NA	NA	NA	\$5,500.00
Elections			NA	\$150.00
Supplies	NA	NA	NA	\$32,000.00
Travel and Registrations	NA	NA	NA	\$7,500.00
Cost-Share	NA	NA	NA	\$212,808.00
Professional Services				
Environmental Engineer	Contracted	\$57.23		\$2,861.50
Archaeologist	Contracted	\$8,000.00		\$8,000.00
				\$274,419.50
			Total	\$608.857.90

Key Decision Makers

- PRLCD Board of Supervisors- Ultimate decision making authority; the Board of Supervisors guides actions and decisions which are then implemented by the District Manger and staff.
- PRLCD District Manager- Implements the decisions of the Board of Supervisors as well as advises the Board in decision making. Delegates tasks and responsibilities to other staff.

Benchmarks, Timeline, & Actions:

- Non-point source pollution
 - 1) Encourage and incentivize adoption of precision application technologies
 - 2) Encourage and incentivize reduced tillage practices and no-till

Strategic Priority: Herbicide Resistances

Measurable Goal: 1 3-year cover crop research trial, 5 keynote addresses, 60 media posts and/or outreach communications.

Benchmark	Timeline	12 Month Actions
5 Keynote addresses	End 2025	Organize Annual Meeting
at PRLCD Annual		Book Speaker(s)
meeting		
60 media posts and/or	End 2025	Increase social media presence
outreach		Post/distribute monthly about herbicide resistance issues
communications		in 2021
Incentivize alternative	End 2025	Survey for producer interest
chem-fallow		Initiate discussions with DoE staff about possible cost-
treatments		sharing
		Pursue cover-crops as alternative to chem-fallow
		Continue trial work with The McGregor Company

Strategic Priority: Decreasing Soil pH

Measurable Goal: 5 keynote address, 60 media posts and /or outreach communications

Benchmark	Timeline	12 Month Actions
5 Keynote addresses	End 2025	Book keynote for 2021 annual meeting
60 media posts and/or outreach communications	End 2025	Monthly post and/or outreach through 2021
1 Research Demo	End 2025	Partner with McGregor R & T to conduct soil pH/lime research demonstration.

Strategic Priority: Uncertain Funding

Measurable Goal: Add to the number of funding organizations (BLM, DoE, RMEF, NRCS, NACD, WSCC) from the current 7 organizations to 9 by 2025, attend annual NRCS local work group meeting, vocalize funding concerns/desires to legislative advocates; WSCC, WACD, NACD

Benchmark	Timeline	12 Month Actions
Acquire funding from	End 2025	Capitalize on winter '20-'21 grant writing season
2 new		
organizations/sources		
Attend 5 NRCS local	End 2025	Attend 2021 meeting
work group meetings		
Engage reps from	End 2025	Improve relationships and make proper acquaintances
WSCC, WACD and		where they have not yet been made. Communicate
NACD		funding and resource concerns.

Strategic Priority: Non-point source pollutants

Measurable Goal: Implement 5 miles of riparian enhancement, implement an additional 13,500 acres of direct-seed, increase precision application technology adoption

3) Encourage, incentivize and implement stream buffers of all sorts; riparian forest buffers, commodity buffers, grass buffers, filter strips etc.

4) Increase small willow specie plantings in riparian zones.

Benchmark	Timeline	12 Month Actions
5 miles of riparian	End 2025	Cut 2000 willow whips for spring 2021
enhancement		Plant 2000 self-cut willow whips in spring/summer 2021
		Include 2000 willow whips in annual field work schedule
		Plan and Implement/enhance up to 3 miles of riparian
		forest buffers in 2021 (Jordan, Thurston, Malden sites)
		Complete buffer strip plans (Crider, Scheuerman)
Implement 13,500	End 2025	Secure DoE funding in 2021
acres of direct-seed		Acquire participants (9) in 2022
		Secure DoE funding in 2022
		Acquire participants (9) in 2023
Implement 7,500	End 2025	Secure DoE funding in 2022
acres of cover crop		Acquire participants (10) in 2023
Develop local custom-	End 2021	Create Smartsheet database for available custom-
seed network		seeders.
		Identify as many direct-seed drill owners as possible.
		Connect drill owners willing for custom work to producers
		wanting custom work.
Fund 10 precision ag	End 2025	Include \$10,000 for 2022 budget
systems		Promote funding opportunity