



Dungeness River Management Team

Cooperative Management of Our Watershed's Resources

Coordinated by Jamestown S'Klallam Tribe and Clallam County

1033 Old Blyn Highway ☐ Sequim, WA 98382 ☐ (360) 683-1109

October 29, 2021

RE: Support for Dungeness Streamflow Restoration Off-Channel Reservoir Project

To Whom It May Concern:

The Dungeness River Management Team (DRMT) expresses its continued strong support for the Dungeness Off-Channel Reservoir Project, as detailed in the attached *Resolution in Support of the Dungeness Flow Restoration and Aquifer Recharge Off-Channel Reservoir*. Supporting this multi-benefit project reflects our ongoing commitment to better water resource management for all.

The DRMT has supported and helped to facilitate water conservation partnerships within this watershed for over three decades, as documented in the attached *History of DRMT support of streamflow enhancement, storage, and aquifer recharge*. Planning for healthy water supplies and instream habitat has been an important focus of collaboration from the DRMT's beginning. However, meeting our watershed's current and future water needs continues to be a challenge, and more so now as the environmental impacts of climate change become increasingly apparent. We are eager to see this long-envisioned project come to fruition, and are hopeful about the contributions it will make to our area's climate change resiliency.

We appreciate your serious consideration in providing funding assistance to this important project.

Sincerely,

Hansi Hals, Chair, DRMT
On behalf of the DRMT

2021 DRMT Membership

City of Sequim	Olympic Peninsula Audubon Society
Clallam County	Protect the Peninsula's Future
Clallam Conservation District	Riverside Property Owners
Clallam PUD #1	Sports Fisheries
Dungeness National Wildlife Refuge	US Forest Service
Dungeness River Audubon Center	WA Department of Ecology
Jamestown S'Klallam Tribe	Water Users Association
North Olympic Land Trust	

Attachments:

- (1) *Resolution in Support of the Dungeness Flow Restoration and Aquifer Recharge Off-Channel Reservoir (with updated 2021 DRMT membership)*
- (2) *History of DRMT support of streamflow enhancement, storage, and aquifer recharge (updated 2021)*



**DUNGENESS RIVER MANAGEMENT TEAM
RESOLUTION
IN SUPPORT OF THE DUNGENESS FLOW RESTORATION AND
AQUIFER RECHARGE OFF-CHANNEL RESERVOIR**

WHEREAS, the Dungeness River watershed is water-short most years during the critical period in late summer when both agricultural irrigators and ESA-listed salmonids rely on adequate streamflow; and

WHEREAS, reservoirs of water held in annual snowpack and ancient glaciers are decreasing over time, and extreme low-flow conditions on the River are becoming more frequent and exacerbated during drought years; and

WHEREAS, the Dungeness River Management Team (DRMT) is a partnership of individuals and stakeholders working together to develop and pursue implementation of locally based, long-term solutions to Dungeness Watershed management issues for 30 years; and

WHEREAS, the DRMT has vetted the reservoir project proposal and prioritized it over other flow restoration proposals because:

- The project addresses all DRMT's key River Restoration recommendations: flow restoration, aquifer recharge, and habitat and floodplain restoration.
- The DRMT recognizes that "low hanging fruit" is gone and remaining projects are complex and expensive but still necessary.
- An 88-acre, 1500 acre-feet off-channel reservoir is expensive no matter when or where it's built, but the Dungeness proposal saves potential cost because:
 - The parcel is timber land not zoned for development
 - Conveyance infrastructure and easements are already in place via the irrigation network
 - No pumping is required since location allows flow by gravity
 - The site is appropriate for and acceptable to the County for recreation as a County Park
- The reservoir planning team continues to identify ways to cut costs, fund future construction, find models for local cost-share for future operations, and facilitate aquifer recharge, and it works closely with the Dungeness Water Exchange with a dual mission of mitigation and restoration as administered by Washington Water Trust.

WHEREAS, the DRMT has discussed and supported proposals for water storage via reservoirs and aquifer recharge for well over a decade, including as a key recommendation in multiple plans, policies and studies, such as:

- Climate Change Preparedness Plan for the North Olympic Peninsula (2015)

- East WRIA 18 Instream Flow & Water Management Rule and the Dungeness Water Exchange Mitigation Plan (2012)
- Clallam County Comprehensive Flood Hazard Management Plan (2009)
- Puget Sound Chinook ESU Recovery Plan (2007)
- Elwha-Dungeness (WRIA 18) Watershed Plan (2005)

WHEREAS, finding funding to implement the Flow Restoration and Aquifer Recharge Off-Channel Reservoir is DRMT's highest priority because the project addresses all top recommendations for River Restoration:

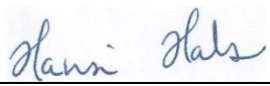
- Streamflow restoration: The reservoir provides significant flow benefits during the River's critical period for migrating salmonids. Avoidance of 30-50% of late summer irrigation diversions will retain up to 25 cfs of existing streamflow.
- Aquifer recharge: Stored winter-time high flows can be used for aquifer recharge in non-drought years when it doesn't need to be saved for late summer irrigation. Recharging the shallow aquifer has streamflow benefits and will offset impacts of consumptive groundwater withdrawals.
- Habitat and floodplain restoration: Up to 25 cfs of flow retention especially improves side-channel habitat important for certain species in certain life stages.
- Multiple other benefits include:
 - Long-term agricultural viability: Stored water provides reliable late-season irrigation supply for the agricultural industry over the long term. Without stored water, irrigation supplies are dependent on snowmelt sources, which are rapidly declining.
 - Climate resiliency: Decreasing water supplies is the biggest climate change concern for the region, and this project provides options for socioeconomic as well as environmental problems.
 - Stormwater pollution prevention: Capturing runoff will lessen stormwater volumes now entering urban areas where copper and rubber contamination can be lethal to fish, especially Coho.
 - Recreation, wildlife habitat, and other benefits
- Clallam County agrees to own the reservoir property and that the reservoir is its top water resources funding priority.
- Local stakeholders are mobilized and the reservoir planning group has great deal of popular support in the community and among agencies, including fish and wildlife interests. The planning group is actively identifying reservoir construction cost-cutting measures and local cost-share models for funding future operations.

WHEREAS, state funding for streamflow restoration projects will be made available to certain basins in Washington state including the Dungeness as allowed in ESSB 6091 (January 2018) and documentation of support from stakeholders and initiating governments is requested.

NOW, THEREFORE, IT IS HEREBY RESOLVED that the Dungeness River Management Team (membership listed below) supports the Dungeness Off-Channel Reservoir as its highest priority to implement flow

restoration, water storage and aquifer recharge because of its scale, location, cost/benefit and feasibility.

Adopted by the DRMT on this 10th day of October, 2018.

Signature: 

Name: Hansi Hals

Title: Chair, Dungeness River Management Team, and
NR Director, Jamestown S’Klallam Tribe

DRMT Membership (updated Oct 2021):

Organization	Member	Alternate
Voting Members		
Clallam County	Cathy Lear	Mary Ellen Winborn
Jamestown S’Klallam Tribe	Hansi Hals	Shawn Hines
Riverside Property Owners (RM 0-3.25)	Robert Beebe	James Beebe
Water Users Association	Ben Smith	TBD
Sports Fisheries	Donald Hatler	N/A
Olympic Peninsula Audubon Society	Robert Phreaner	Peter Walker
WA Department of Ecology	Michael Gallagher	N/A
Dungeness Beach Association	TBD	TBD
City of Sequim	Ann Soule	Pete Tjemsland
North Olympic Land Trust	Michele Canale	TBD
Protect the Peninsula’s Future	Judy Larson	Tony Corrado
Estuary Tidelands Property Owner	Matt Heins	N/A
Dungeness River Audubon Center	Powell Jones	Jenna Ziogas
WA Department of Fish and Wildlife	Danielle Zitomer	TBD
Advisory Members		
Dungeness National Wildlife Refuge	Lorenz Sollmann	Jennifer Brown-Scott
Clallam Conservation District	Kim Williams	Don Hatler
U.S. Forest Service	Yewah Lau	Marc McHenry
Clallam County PUD#1	Tom Martin	N/A

History of DRMT support of streamflow enhancement, storage, and aquifer recharge. Aug-Sept. 2018 (Updated Oct 2021)
(Key documents and strategies are in bold)

Existing plan or report	Relevant content	Year	DRMT involvement
Dungeness Off-Channel Reservoir (aka, River Road Reservoir) Project , Anchor QEA for Reservoir Work Group Related: Video, graphics, and site tours to illustrate broad support, multiple benefits, and reservoir operations	Executive Summary and Project Proposal provided basis for Work Group's funding pursuits and information sharing sessions with state agencies and other funders to generate support for: Land acquisition only: DNR Trust Land Transfer Program (2016, 2018) Land acquisition and final design : SRFB / PSAR (2016, 2018); FbD (2016); PSP Action Agenda (2014, 2018/includes construction phase); State Supplemental Capital Budget (2017-18) Stormwater capture components : FEMA Hazard Mitigation (2016)	2016-21	Various presentations to DRMT to update on project and generate support letters (attached) for funding applications; members also provide support letters
Benefit/Cost Analysis: Off-Stream Reservoir , Gray & Osborne	Methodology for Climate Resilient Mitigation Activities per Hazard Mitigation Grant Program (WA Dept. of Military & FEMA), includes analysis of impacts due to flooding, value of irrigation water, value of habitat, value of stored water, and FEMA damage frequency.	2016	Members indirectly involved
Climate Change Preparedness Plan for the North Olympic Peninsula, NOPRCD	Top 10 strategies: For Water Supplies: WS-6 " <u>Continue to study ways to enhance water storage and groundwater recharge</u> " including identifying locations for new structures, off-stream storage, active recharge such as infiltration wells, potential for "banking" water during high flow events for use in low flow times, noting that storage and recharge opportunities were studied in 2014 for the Dungeness area. For Ecosystems: ES-5 " <u>Increase regional capacity for water storage</u> " in particular for recharge, for mitigation, for irrigation, and exploration of innovative technologies for storage. For Critical Infrastructure: CI-10 " <u>Enhance stormwater retention in upstream areas.</u> "	2015	Members directly involved in workshops
Dungeness River Flow Enhancement Project: Designs and Supporting Analyses, PGG & Anchor QEA for WWT	First evaluation of River Road off-channel reservoir site relative to other sites with streamflow enhancement potential for mitigation and/or restoration. Attachments D1-D4 provide preliminary reservoir design with size/configuration options, geotechnical results, and probable costs.	2014	Members directly involved
Climate Vulnerability Assessment and Adaptation Plan, JST	Lists salmonids as the highest ranking for priority and vulnerability; recommendations include " <u>Restore stream and streamside habitats and enhance instream survivability, likely in partnership.</u> "	2013	Observing

History of DRMT support of streamflow enhancement, storage, and aquifer recharge. Aug-Sept. 2018 (Updated Oct 2021)
(Key documents and strategies are in bold)

Existing plan or report	Relevant content	Year	DRMT involvement
East WRIA 18 Instream Flow & Water Management Rule , Dept. of Ecology	Establishes mitigation requirement for new uses, instream flow level for River and small streams , and maximum allocations for diversions from the River during months it's not closed	2012	Members indirectly involved
Dungeness Water Exchange Mitigation Plan , WWT and LLWG	Establishes in-kind strategy for mitigating new uses of water, including: <u>Shallow aquifer recharge</u> with River water via irrigation ditches, <u>Build a large storage reservoir</u> (Atterberry or another location) for WUA	2012	Members directly involved in Local Leaders Work Group
Clallam County Comprehensive Flood Hazard Management Plan, Flood Hazard Advisory Committee	General stormwater management recommendations, infiltration facilities to be favored as a water supply management strategy.	2009	Members directly involved in making recommendations; provided updates and opportunities to comment
Aquifer Recharge Feasibility Study, Pacific Groundwater Group for Clallam Co.	Analyzes three scenarios including transient modeling and costs: using abandoned <u>irrigation ditches to recharge River water</u> , using an infiltration basin to recharge reclaimed water, using ASR (injection) to recharge River water	2009	Members directly involved
Watershed Plan Implementation Priorities, (Author uncertain)	Six "High" priority projects include: #2, <u>Study of off-channel storage potential</u> ; #3 Implement Ag Water Cons Plan; #4, <u>Planning/ engineering for SAR</u> ; #6 <u>Construction of Atterberry Reservoir</u>	2008	Direct DRMT involvement, given two "notes" at end
Protecting and Restoring the Waters of the Dungeness (CWA 319 Plan), JST	Goal of meeting flow recommendations for mainstem and side channels. 5.2.4 Regional Water Conservation Strategies listed in the WRIA 18 Plan, 5.2.5 Aquifer Storage and Recharge, 5.3 Salmon Recovery elements including (4) water conservation / instream flow protection, 5.4.3 encouraging infiltration for stormwater management. Partner programs include design and construct storage, Atterberry Road Reservoir, Eastside storage analysis and design, aquifer recharge analysis and design. Salmon Recovery 3-year project list (2005) recommends implementing <u>irrigation water conservation plan</u> by piping ditches, fixing leaks.	2007	Indirect
Hydrogeologic Screening for Sequim Pilot Infiltration Test, PGG	Identification and analysis of five sites suitable for shallow aquifer recharge with good access to recharge water sources—reclaimed water from the WRF and/or River diversions via irrigation ditches	2007	Members directly involved; memo report presented to DRMT

History of DRMT support of streamflow enhancement, storage, and aquifer recharge. Aug-Sept. 2018 (Updated Oct 2021)
(Key documents and strategies are in bold)

Existing plan or report	Relevant content	Year	DRMT involvement
Puget Sound Chinook ESU Recovery Plan , NMFS	The Dungeness Chapter incorporates “10 Strategic Restoration Elements of the Dungeness Watershed”, which includes: “Water Conservation/Instream Flow Protection and Water Quality Improvement/Protection.”	2007	DRMT members directly involved in Shared Strategy process (and formally endorsed approach) to develop Recovery Plan
Comprehensive Irrigation District Management Plan, Draft (Final but never approved by all WUA members), HDR and others for the WUA	Primary Habitat Conservation Measure (HCM-1) involves reducing diversions through actions in the Water Conservation Plan (1999) and <u>construction of storage capacity.</u>	2003-06	Members directly involved
Shared Strategy / Dungeness Watershed Salmonid Recovery Notebook (precursor to Dungeness Chapter of Puget Sound Chinook Recovery Plan), DRMT	Addresses 6 questions posed by Shared Strategy for Puget Sound and incorporates “10 Strategic Restoration Elements of the Dungeness Watershed.” Expected results from the Water Conservation element include: Increased stream flow, Fewer side channels cut off due to low flow, Easier migration of adult salmonid during higher flows, Reduced likelihood of thalweg spawning, Increased water quality (temp and DO); Specific recommendations: Implement CIDMP projects, Implement other domestic/municipal water conservation projects found in WRIA 18 Plan	2005	DRMT directly involved in producing Dungeness Watershed Salmon Recovery Notebook and submitting to Shared Strategy for Puget Sound Development Committee
Elwha-Dungeness (WRIA 18) Water Management Plan , DRMT and EMMT	Recommends multiple actions for water resource and water quality protection and improvement: most relevant include <u>seasonal instream flow levels, shallow aquifer recharge, pursuit of storage including off-channel reservoirs.</u>	2005	DRMT approved
Ecosystem Diagnostic and Treatment (EDT) Model/ Analysis of Actions for Dungeness Chinook, Mobrand Biometrics, Inc.	Models and ranks restoration/protection actions on Dungeness Chinook salmon. “Water Conservation Projects” listed as one of the actions; specifically, “Implementing the CIDMP recommendations” ranked #1 out of 31 actions. From EDT Analysis: “This action is <u>predicted to produce the highest increase in both productivity and life history diversity</u> among all actions”	2004	River Restoration Work Group directly involved, as well as some “policy reps of DRMT” (per Shared Strategy Notebook)
Restoring the Dungeness , JSKT	“10 Strategic Restoration Elements of the Dungeness Watershed” (an update of the “7 Pillars”) includes “Water Conservation/Instream Flow Protection” and “Water Quality Improvement/Protection”	2003	Endorsed by DRMT; members directly involved

History of DRMT support of streamflow enhancement, storage, and aquifer recharge. Aug-Sept. 2018 (Updated Oct 2021)
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Existing plan or report	Relevant content	Year	DRMT involvement
Survey of instream flow and side channels, JSKT/BOR	Establishes side channels as critical habitat, and describes mainstem flow ranges needed in order to meet specific side channel habitat criteria for specified fish species.	2003	Presented to DRMT
Aquifer Storage and Recovery Evaluation Report, Tetra-Tech/Foster-Wheeler	Modeling of ASR provided typical annual River volume available, benefits may extend deeper than the shallow aquifer, benefits may extend to surface streams if recharge is in vicinity. Study was done to support the state EIS for the 1999 WUA Water Conservation Plan.	2003	Members involved
Physical Processes, Human Impacts, and Restoration Issues of the Lower Dungeness River, BOR	Recommends specific habitat restoration projects not including water conservation	2002	Members directly involved
Limiting Factors Analysis, Haring (WA Cons Comm)	Establishes flow as a limiting factor	1999	Members directly involved
Comprehensive Agricultural Water Conservation Plan , Montgomery Water Group for the WUA	Key recommendations: Piping ditches; Artificial storage of high flows ; Re-regulating reservoir (for eastern ag lands – built off Port Williams Rd.); and more	1999	Members directly involved
Recommended Restoration Projects for the Dungeness River (“Blue Book”), River Restoration Work Group	Low stream flow conditions is one of three limiting factors. Conserve instream flows is one of “Seven Pillars of River Restoration.”	1997	Authored by DRMT subcommittee