

## APPROVED DRMT Zoom Meeting Notes April 14, 2021

Prepared by Shawn Hines, Jamestown S'Klallam Tribe

**DRMT Members Present:** Hansi Hals/Jamestown S'Klallam Tribe, Robert Beebe/Riverside Property Owners, Cathy Lear/Clallam County DCD, Ann Soule/City of Sequim, Ben Smith/Dungeness Water Users Association, Tony Corrado/Protect the Peninsula's Future, , Powel Jones/River Center, Shawn Hines/JST, Robert Phreaner/OPAS, Mike Auget/NOLT, Ann Soule/City of Sequim, Lorenz Sollman/USFW/Dungeness Refuge, Tony Corrado/PPF, Jenna Ziogas/River Center, Joe Holtrop/Clallam Conservation District, Jennifer Brown-Scott/USFW

**Others Present:** Genie Mixon/Resident, Carol Hull/Leauge of Women Voters, Robert Knapp/JST, Mackenzie Grinnell/JST, Emma Brownell/JST, Bob Simmons/WSU Extension, Phil Martin/Resident, Fred Sharpe/Olympic Peninsula Prairies/Washington Native Plant Society, Tiffany Royal/NWIFC, Lance Vail, Lisa Barrell/JST, Heather Watts/Clallam County, Phil Martin/citizen, Tom Sandford/NOLT, Emily Dick/WWT, Alex Scagliotti/Graysmarsh, John Steidneck/Resident, Marguerite Glover, Sequim Realtors, Randy Johnson/JST

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### I. Introductions / Review Agenda / Approve March 10 Draft Meeting Notes

Hansi called meeting to order, introductions, mention what you're harvesting in chat, review notes.

- Ben moved to approve March meeting notes, Robert Beebe seconded. Motion passed unanimously.

Public Comment

- Shawn noted meeting will be recorded for note-taking purposes.

### II. Native Plants Restoration @ Dungeness National Wildlife Refuge – Project Update

*Lorenz Sollmann, Dungeness National Wildlife Refuge*

- Lorenz reminded members of the field trip DRMT took a few years back of the prairie restoration site at the Refuge.
- Prior to planting (2015), was a non-native grassy field, previously grazed, forest encroachment. Mowed, sprayed, and rototilled the site. Takes two years to control non-natives. Mix of science and art in restoration. Two sites.
- Many helping hands, volunteers. Mix of seeding and live planting plugs.
- Divided into plots showing year each started and year it was seeded. Cages around Gary Oaks to keep deer away from newly seeded areas. Eventually removed cages as more established.
- Virtual tour of the many flowering plants at the site, including re-introduction of golden paintbrush which was a major goal. In four years, over 3,000 flowering golden paintbrush. Still listed on Threatened and Endangered list, but this project is helping.
- Much diversity at the sites.
- Seeded camas, but wasn't doing so well and jumpstarted with bulbs. Some now getting established.
- Changes color over the season, looking spectacular!

### III. Importance of Prairie Restoration

*Joint presentation by Mackenzie Grinnell and Emma Brownell (Jamestown S'Klallam Tribe) and Fred Sharpe (Olympic Peninsula Prairies)*

#### Mackenzie and Emma

- "Cultural Ecosystem – notion that humans are integral to, rather than separate from the natural world, that a relationship between these landscapes require human involvement with them if they are to continue to exist". Described the importance of prairies to Klallam people since time immemorial. Generations of Native peoples have passed down knowledge of the plants/prairie ecosystems. Tribe's Native Foods program bringing awareness to that history and helping to restore local prairies.
- Prairie formation after glaciers receded. Seeds of different plants were left behind. As the plants came in, Tribal culture taught themselves about their individual uses. Feel responsibility to learn about these plants and ecosystems now to bring them back, pass the information on about the importance to Tribes.

#### Fred Sharpe

- Became interested in prairies initially from their beauty. Discussed prairie birds and how they are no longer here with loss of prairies.
- Prehistory – how old are the prairies?
- Evidence that the Olcott people ("proto-Salish" people, 11,000 years ago) were utilizing these sites, practicing ecological management through use of fire, weeding, and other methods. As climate cooled, burning was more necessary without as much lightning strikes.
- Prairie sites were very important for providing a variety of foods that weren't available in forests: camas, bulbs of tiger lily, chocolate lily, wild onion, berries, biscuit root, basketry materials, etc.

- Became interested partially due to their dire conservation needs. From estimated 10,000 acres of grasslands and savannah in lower Dungeness, down to less than 1% in Dungeness, so these restoration sites are extremely important, and finding remaining sites is extremely important. Getting people interested is more important as immense urbanization has occurred around the Salish Sea. Residential lawns and gardens (pesticides, fertilizer, etc.) are a contributor to contaminants of Salish Sea. Also farming, irrigation, grazing animals, the fact that Sequim Prairie is so flat and easily modified, housing developments, introduction of non-native plants, all contributors to reduced prairie sites
- Finds old prairie sites by looking at existing tree structures, which offer clues. Tree ring dating. Charcoal scaring. Much of the burning stopped during historic pandemics. Tree mortality. Prairie ecosystems also interface with beach ecosystems. Beach characteristics can help with determining if former prairie existed. Indicator plants. Photographs, comparing them with today. Literature. Fire reports. Mediterranean zone.
- Some nice reservoirs of prairie vegetation in the upper watershed, above where animals would graze and at elevations settlers couldn't reach, "safe sites".
- Typical plant – 5 times the biomass occurs below ground as above. That's why the soils are so important to understand, document and protect. Beautiful black soils characterize some of the Sequim Prairie. "You can measure the ethics of a society by how they treat their soils" – Benjamin Franklin? Some of it being used for fill and building.

Discussion about the Sporseen Prairie (one of the Sequim Prairies) – Most southern, one of the more isolated of the prairie complex, glacial and riverine features in the soils. Greencrow is doing a phase 2 development, south of Silberhorn Rd. Decided to preserve a handful of the Gary Oak clusters at the site; being worked around and protected from the construction. Planners have arranged that the protected area will also be used as a nursery for any prairie plants found during construction. They will be brought over and planted in Gary Oak Grove.

Mackenzie mentioned that Tribe is also very much interested in prairie preservation, not only prairie preservation. Protecting existing prairies might even be more valuable. And also focusing on how prairies are managed. For example, at the prairie site at Dungeness River Center, Tribe is not using herbicides, since so many of the species have foods and medicine to be harvested. It's a form of agricultural for the Tribe – weeding, burning, planting, transplanting, etc. They used plastic to kill off non-native seed, then tilled, waited for rain, sprouted. Did this twice. Want to go back and harvest many of the roots. That's the reason why the Tribes are involved. Also the medicines found there, not found anywhere else. Trying to bring seeds from various spots.

What does success look like seven generations from now?

Fred – a functioning biome, with full range of pollinators. Seeing some of the prairie birds come back. Awareness so soils are inventoried, respected, rebuilt. A camas feast.

Mackenzie – described how tribes used to fill whole canoes full of camas and have big bakes, and also store for winter. Having prairies accessible, and bringing our people back into the prairie ecosystems. The restoration projects go only so far, but also bringing back traditional ways of managing them, the prairies are coming back faster. When harvested correctly, for example, other plants may actually come back faster, and the prairie becomes more robust and more resilient.

#### **IV. Dungeness Water Exchange – Update**

*Emily Dick, Washington Water Trust*

Overview – 2013 Dungeness Water Rule closed rule area to new water rights. Dungeness Water Exchange initiated to offset new uses. "The Exchange was created to serve the public interest to realize flow restoration in the Dungeness as well as provide new water for economic development through mitigation".

Advisory Council – Clallam County, City of Sequim, Department of Ecology, Jamestown Tribe, Dungeness Water Users Association, WWT, Clallam Conservation District, WDFW. Came together to provide process resulting in mitigation certificate for landowners. New homebuilders or land divisions apply for mitigation, WWT reviews it and determines what they may be eligible for. Results in a certificate, meaning that your home has a net zero impact on the local water supply of your neighbors, stream and salmon. We do operate and manage mitigation projects to underpin those certificates. Mitigation done through aquifer recharge sites primarily. Wells withdraw water from aquifer, while sites infiltrate water from recharge when water is more plentiful, for benefits during critical low flow periods. Current prices/packages (one time fees):

When Exchange was formed, the intent was that it would be self-sustaining. Not occurring at those prices. Those were

Indoor Mitigation	Outdoor Mitigation	Stockwater Mitigation
YEAR-ROUND	APRIL 15TH - SEPTEMBER 15TH	YEAR-ROUND
Indoor use (150 gpd) – \$1,000	Basic Outdoor (50 ft <sup>2</sup> - 210 gpd) – \$1,000 Extended Outdoor (75 ft <sup>2</sup> – 474 gpd) – \$2,000	Up to 5 animals (60 gpd) – \$1,300 Up to 10 animals (120 gpd) – \$1,800 Up to 15 animals (180gpd) – \$2,200
Note: The Exchange accounts for domestic mitigation using an average daily amount of 150 gallons (WAC 173-518-080 (b)). Minimal incidental outdoor use such as washing windows, and watering potted plants in the footprint of the home is included.	Note: The amount of outdoor use is based on the amount of irrigation required for turf grass according to the Washington Irrigation Guide (20.80 inches/yr). A larger amount of landscaping or garden area may be possible with the same number of gpd.	Note: Department of Ecology has concluded that stockwater mitigation is needed for ungulates only (cows, sheep, pigs, horses, llamas, donkeys etc). This does not apply to poultry such as chicken and ducks, or pets such as dogs and cats.

meant as introductory. Now know these prices not sustainable. Have been reviewing many options, did an analysis of pricing, presented to Advisory Council with feedback. In 2020 updated analysis looking at 2017-2019 costs. Identified different approaches to financial stability/reserves.

Principles and Assumptions Informing New Pricing, based on counsel from Advisory Members:

ASSUMPTIONS	PRINCIPLES
➔ Include Capital Expenditures	➔ Build Reserve Sufficient to Cover 10 Years of Operation and Capital Costs by 2030
➔ 64 Certificates Sold Annually	➔ Revisit Progress Towards This Goal and Adjust Accordingly by 2025
➔ Continued Cost Reductions in Certificate Issuance and Operations	➔ Adopt Policies to Separately Account for and Manage Reserve Funds
➔ Starting Bank Balance of \$275,000*	

\*In 2018, DWE Managers began utilizing Ecology funds to support exchange operations, directing all certificate sales revenue to build a reserve in order to achieve financial stability. A phased approach was recommended:

New pricing/packages:  
Effective July, 2021: \$4,000  
Effective Jan 1, 2023: \$5,250

Mitigation packages:  
Indoor, 150 gpd  
Basic outdoor, 210 gpd, April 15-Sept 15  
Up to 15 stock, 180 gpd

Anything that falls outside of the above packages is “custom”. Custom on septic is priced \$/consumptive afy as above. Custom on sewer is case by case.

Next step: outreach, coordination. See website for more info.

**V. Other Orders of Business, Announcements & Standing Agenda Items**

- Standing Item: Other Project Updates and/or Announcements
  - Dungeness/ONP Snowpack Update, Ann Soule, City of Sequim:  
Ann noted that April is the usual timeframe of peak snowfall accumulation in our area. Ann noted that NRCS recently revised their website. Showed the Dungeness Snotel site. [See follow up email to this meeting for links]. Viewed the Water year daily dat for 2021. Noted that the Average Accumulated precip year says data is from 1981-2010. The 30 year range is a convention that

National Weather Service uses, the averages for each date of the most recent 3 decades. The gage wasn't actually put in until 1999, however. Snow Water Equivalent translates the snowpack into how much water is in that snow. Average, and 2021 both found on that chart. Shows April is the peak. Currently showing 2021 water year data is 251% of long term data on April 1.

- The updated webpage shows maximum, minimum, and various percentiles and median. Showing 73% of longterm average on 4/13 for precipitation.
  - Cause for celebration, however some caveats.
  - Long-term normal is only based on 12 years of data, 1999-2020. Not a true 30-yr normal, due to when gage installed. But it has been extrapolated.
  - Just passed into 2021, so a new set of climate normals (for temp, snow, etc) is now due. Will come out in May.
  - Also, they are going to consider a 15-year normal because of variability in data due to climate change. Will result in fewer exceedances of normal.
  - Dungeness Snotel is at 4,000 feet. Different snow patterns than others at higher elevations.
- Standing Item: Review Next Agenda for any additions.
    - Hansi – a larger conversation about changing from 30-year range to 15-yr range might be called for, possibly with invitation to someone at NRCS. Bill Backus at Park Service might also be available to talk about USGS role. Potentially have a whole agenda on the topic. Scott Pattee would also be a good contact.
    - Hansi – there's been a lot of work about climate forecasting/modeling. Toolkits that show what sea level rise would look like at specific sites. Potentially invite leads to come speak to DRMT about these tools. Ryan Murphy, Ian Miller, Karen Affeld, etc.
  - Standing Item: Project Updates
    - Cathy - Dike project on schedule to go to bid next month.
    - Hansi – River's Edge project also moving forward. Hansi suggested that an agenda item in the future to bring everyone up to speed on where the two phases of the dike project are would be good.
    - Heather – OSS Fee proposal to Clallam Board of Health will happen at their May 18<sup>th</sup> meeting.
    - Bob Simmons – Rural stormwater grant – working with Tribe to put in a raingarden at the River Center.

**Meeting Adjourned**