

**Meeting Participants:** Dave Fuller (BLM), Scott Greacen (FOER), Mary Burke, , Dave Kajtaniak (DFW), Allan Renger (DFW), Matt Metheny (CalTrout), Patrick Vaughan (CA State Parks), Amber Transom (CA State Parks), Eric Stockwell (ERRP), Dave Sopjes (ERRP), Richard Joshua Strange (Stillwater Sciences), Scott Monday (DFW), Isaac Mikus (DFW), Tim Nelson (Wiyot Tribe), Dave Heaton (CalTrout), Joelle Geppert (NCRWQCB), Patty Torres (Wiyot Tribe), Vince DiMarzo (Wiyot Tribe), Park Steiner (PG&E), Paul Kubicek (PG&E), Ashley Woodford (WSP), Andrea Poteet (CCC), Angela Cruz (WSP), Rachael Karlov (WSP), Kori Roberts (CDFW), Kaydee Boozel (former CDFW), Abel Brumo (Stillwater Sciences), Samantha Kannry (resident), Shane Anderson (Pacific Rivers), Brian Starks (PSMFC), Ryan Bernstein (CDFW), Jason Hartwick (fishing guide), Ethan Bertz (region), David Wagder (ERRP volunteer)

Overview of agenda by Dave Fuller

### **Partner Updates**

*Paul Kubicek, PG&E-* Potter Valley update. Relicensing by FERC is underway. Current license over in 2022, process begins April 14, 2017 (5 years out). PG&E has filed notice of intent to re-license. PG&E has submitted pre-application document- description of project, studies, impacts, etc. Ukiah meeting in early March provided info on project, and how people can get involved. PAD gets public review and comments. Next step is to ID info gaps, starting this spring and summer. Objective is to ID studies to fill in info gaps- Study years will be 2018-19. Good attendance at meetings (69 people, various stakeholder agencies represented).

*Joelle Geppert, (NCRWQCB)-* The Water Board is working on rural roads initiative. We are in pre-planning stages to address non-regulated sources of sediment. Cannabis permitting gives access to some sites, and puts roads under regulation which weren't previously covered.

*Dave Kajtaniak, CDFW-* Coastal Watershed Assessment Program update: The Yager Creek watershed assessment draft is on website of CWAP. Has recent fish info from recent carcass surveys, though other info is from 2006. Comments welcome.

*Scott Monday, CDFW-* hab typing last summer. Saw coho higher than documented on cooper mill. Will continue van dozen hab typing, and some SF eel hab typing of reaches not done in a while. This spawning yer started off strong, with good #s of chinook compared to other seasons. Coho came in Christmas, went up high right away, then rains prevented surveys. Anderson Cr had many chinook and coho, report in 2 months

*Patrick Vaughan, CA State Parks-* Benbow dam is basically gone, with some sub-surface concrete left. Bull Creek floodplain restoration proposal is in the works with Caltrout.

*Tim Nelson, Wiyot Tribe-* We have an assessment report on island, and a Wiyot wetland guide. Green sturgeon report will be done in June.

*Dave Fuller, BLM-* We are in early stages of a plan for the Arcata and Redding office areas. Lots of eel river land in this. The envisioning process took place last summer, scoping this winter, with preliminary alternatives coming out for public review. Plan is scheduled to be done in 2019. Google BLM NWIP NW integrated plan.

*Mary Burke, CalTrout*- There is an upcoming steelhead days end event at Mckinleyville teen center. Watershed tours in Van Duzen led by Eric Stockwell were a success. There is a video section on caltrout website showing the Eel River.

*Eric Stockwell, ERRP*- Humboldt Redwood Company has granted access for ERRP spawner surveys, thank you! We can now access HRC land. Did training with HRC and CDFW. Yager and Lawrence creeks have high potential. No more trespass grows on HRC land since legalization.

*Dave Kajtaniak, CDFW*- highlight of Yager Cr report- coho not seen for 10 years or so before 2010, spawners seen since 2010.

*Pat Higgins, ERRP*- ERRP has 250 members now. We have a Cyanotoxin analysis using crowd funding. Post-bypass Willits plan. *Willits go wild* on ERRP website, elk, steelhead, etc. to cheer up Willits post-bypass. Thanks Park Steiner and Shane. We have a water temp study coming up with hundreds of loggers. Some tribs are dying up.

*Eric Stockwell, ERRP*: 15-30,000 estimate for Chinook. Good year for Chinook compared to other years. Chinook came early, with early rains. No disease (eye flukes) observed. Fish spawned high with rain. Hoping for no redd scour. Higher count than last year. Hoping for high count next year. Also high lamprey numbers.

*Issac Mikus, CCC*- Hollow Tree Cr and other Redwood Cr work is ongoing. We have 5 FRGP proposals in the works putting wood in creeks.

**“Groundwater Sustainability Plan Alternative for the Eel River Valley Groundwater Basin”  
presentation by Hank Seemann, Deputy Director, Humboldt County Public Works Department**

*– this presentation is available on CalTrout’s Eel River Forum website. Notes presented here capture larger points and group questions. Most of the content is contained within the presentation slides.*

One priority watershed in Humboldt for groundwater regulation. 9 water suppliers (municipals). 2014 policy requires sustainable plan. Plan objective is to avoid: depletion of supply, water quality, saltwater intrusion, depletion of connected surface water. Main concern: no surface flow in lower eel in 2014! 2014 was very dry, precipitation-wise.

2014: law passed. 2015: public works steps in to manage, meet with stakeholders. 2016: prop 1 study. 2016: GSP submitted. 2017: comment period for plan. Data collection with prop 1 grant continues.

Groundwater sustainability agency versus groundwater sustain plan. 30 members of working group developed report.

GS plan alternate may work here, since water is not mis-managed last 10 years. GS plan alt. is easier than full plan.

DWR could change priority level of Eel to lower level. This may change our approach.

GS plan alt: SHN worked on plan alt. mapped cross sections, showing alluvial deposits, rock formations, things that affect groundwater storage, transport, diversion locations, etc.

GS plan: area of Van Duzen recharge vs Eel River recharge. Dynamics of what is recharged from where are important to planning. Rifle pool morphology is important, inflection points at riffle crests will be

first places for surface flow to go dry. Long-profile from SHN shows us this for late-season flows. Q map shows Q dropping from Scotia thru van dozen mouth. Big alluvial deposits around van dozen promote under flow.

Long term records of well water levels show steady state of lows and highs 1985-2015. Overdraft shows up with lower lows, like on Santa Rosa creek.

Chloride concentration shows extent of SW intrusion since 1940's. more salt influence deeper, general conclusion- no change in salt over 40 years. New wells dug to explore movement of groundwater. New dataset of surface flow and groundwater flow combined for lower eel.

River went from losing to gaining (with groundwater higher than river level) within a week of rains. Look at many wells to understand communication between surface flows and groundwater levels. GW levels usually lower than river in some places, while it varies in others, and in other places the groundwater stays high. Tidal signature is evident at fernbridge well.

Palmer Env. Did GIS based water budget. We did not have \$ to do big study like Santa Rosa creek. Big picture- look at larger watershed area that feeds the lower eel GW area (Yager feed lower eel, is in model). About 5% of annual GW recharge gets used on acres on lower eel. WY type determine amount water used in our area, statewide averages don't work well here.

Six sustainability indicators say that we are in good shape, other than maybe drawdown of surface water. Evidence for surface water decision given in slide. Low eel flows in 2014 were lack of surface water, not lack of GW. Likely some impact from GW draws on surface water level.

Comments/ Questions:

*Scott Greacen* (FOER): I completely disagree with this conclusion. My comments are available.

*Josh Strange*: threshold to trigger sustainable versus non percent withdrawal.

*Pat Higgins*: lots of wells in upper watershed, will need to be addressed one day. Water in Van Duzen is buried, river goes dry, but GW doesn't go down. ERRP wants to get Van Duzen on surface.

*Ethan Bertz*: I'm from Yager, cooper mill. From 90s to 2000s streams in this area looked bad. Wells grandfathered in didn't help. Seems like draws not helping. Need to start thinking about draws higher up. Priority level should go up, if anything, with less surface water coming down. (*Ethan went on to give some excellent points about where water remains in creeks versus where creeks have gone dry, as well as the importance of taking a conservative approach to keeping streams watered- but the note-taker was unable to keep up*).

*Dave Sopjes*: legislation covers all aquifers, and these have been ranked. All basins should have plan in place in 20 years, according to priority level (but not low priority).

*Hank Seemann*: no management plan is required for low priority basins, that was not point of legislation.

**“A partnership of CDFW, Pacific States Marine Fisheries Commission, and Humboldt Redwood Company-- completed reporting of a four year lower Eel River/Van Duzen juvenile coho survey” – presentation by Scott Monday : California Department of Fish and Wildlife:**

Juv. Distribution part of CMP. Summer snorkel surveys in lower eel/ van dozen. Part of population monitoring for coho. Dives were above tides, within known distribution. PSMFC, CCC, CDFW, HRC co-op effort. 204 total GRTS reaches (with about 50 selected) where flow and gradient allow coho. Reaches were surveyable in one day. Reaches need access permission, or list gets adjusted. Water temp, visibility, pool depth were issues. Coho present in 13.5% of reaches, distributed in 3-7% of available habitat. Present in 7.5% of pools dove, found mainly in cooler pools. Some first documented cases. Pop seems limited by drought, distribution increased after drought. AR: more trib rearing Chinook during drought (also on Russian River) `

**“ERRP 2016 Pikeminnow Monitoring Results and Recommendations for Management” – presentation by Pat Higgins, Eel River Recovery Project**

Presentation: Pikeminnow started from a bait bucket x-fer to Lake Pillsbury, now invaded 40 years. Not just salmonid, also sucker, sculpin, maybe lamprey are being affectd. SF Eel survey Standish hickey to Rattlesnake Creek. Late June dives on descending limb. Pikeminnow seem to be in the deepest pools these days. These pike get lots of juv. Salmonids. Theory is that otters are controlling pikeminnow, since relatively few pikeminnow large enough to predate were seen. Lots of lamprey were seen. Lots of otter scat seen. Woodman reach had few pikeminnow juveniles. Hundreds of lamprey spotted going downstream, maybe back down to good gravel, with poor sediments upstream.

*Park Steiner:* Heavy blasting in the 90's did not stop Pikeminnow. There was immediate re-colonization.

*Justin:* Remember that only 10 fish started the entire Eel River population- so eradication may be difficult. Pat, can you explain the link to otters?

*Pat Higgins:* We think the Pikeminnow population grew faster than the otter population, so otters were unable to exploit the food resource until their numbers grew.

*Shane Anderson:* What about thermal barriers? Redwood Science Lab studied this.

*Pat:* It looks like suckers are moving into colder stream to avoid Pikeminnow.

*SC:* it is goog theat there are gradient barriers to pikeminnow on most streams

*Dave Fuller:* Redwood Science Lab looked at environmental DNA to get distribution of pikeminnow, and they have been in the NF since 2011

*Eric Stockwell:* At ERRP, we have funding to get people out on the water removing pikeminnow

**Potential Topics for next meeting**

1. Maggie Robinson, rural roads initiative
2. Pat Higgins, Eel River Action Plan Sediment Chapter
3. Outside field trip, maybe not a typical forum meeting. The Annual Eel watershed tour bt the farm bureau is a good place to start.
4. Action Plan: organize meeting around action plan chapter, edit Action Plan as we do meeting
5. Pat Higgins, discuss role of federal lands in Eel River basin. Some of our best creeks are on Federal land.