



L O W E R P U T A H C R E E K C O O R D I N A T I N G C O M M I T T E E

TO: Interested Persons

FROM: Rich Marovich, Streamkeeper

DATE: March 14, 2019

SUBJECT: Agenda for Lower Putah Creek Coordinating Committee (LPCCC) Decision Meeting Thursday, March 14th at the Davis Parks and Recreation Training Room: 1818 Fifth Street, Davis from 3:30 to 5:00 PM
Note: Additional Parking is available in back except in numbered spaces. Please sign in at the front desk.

No.	time	Item	
1	3:30-3:40	Public Comment: Comments welcome on matters pertaining to Putah Creek.	
2	3:40-3:45	Approval of Minutes: Minutes of the February meeting will be reviewed.	
3	3:45-4:15	Planning Subcommittee: The subcommittee will report on our second meeting.	
4	4:15-4:35	The LPCCC will:	Review Operational Budget
			Review Nursery Operations
			Review Riparian Diversions Plan
		Patterned Calendar	
5	4:35-4:40	Streamkeeper Report: The Streamkeeper will report on recent events.	
6	4:40-4:50	Member Reports: LPCCC members will have an opportunity to report.	
7	4:50-4:55	Correspondence: LPCCC will discuss any significant correspondence.	
8	4:55-5:00	Next Meeting: Our next meeting will be held on Thursday, April 11 th at the Solano Irrigation District Monticello Room, 810 Vaca Valley Parkway, Suite 201, Vacaville, CA 95688	

M:\2019-03 LPCCC agenda.doc

810 Vaca Valley Parkway, Suite 203, Vacaville, California 95688 ☐ Phone: (530) 902-1794 ☐ Fax: (707) 451-6099 <http://www.watershedportals.org/lpccc>

*The Lower Putah Creek Coordinating Committee consists of:
 Cities of Davis, Fairfield, Suisun City, Vacaville, Vallejo and Winters; Counties of Solano and Yolo; Solano and Yolo
 Riparian Landowners; Maine Prairie Water District; Solano County Water Agency;
 Solano Irrigation District; Putah Creek Council and University of California, Davis*



L O W E R P U T A H C R E E K C O O R D I N A T I N G C O M M I T T E E

TO: Interested Persons
FROM: Rich Marovich, Streamkeeper
DATE: February 14, 2019
SUBJECT: Minutes of Lower Putah Creek Coordinating Committee Discussion Meeting
 Thursday, February 14th at Solano Irrigation District Monticello Room
 810 Vaca Valley Parkway, Suite 201, Vacaville from 3:30 to 5:00 PM

No.	Item								
1	Public Comment: There was no public comment.								
2	Approval of Minutes: Minutes of the January meeting were approved with attendance added.								
3	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="5" style="width: 15%; text-align: center; vertical-align: middle;">3</td> <td rowspan="5" style="width: 55%; text-align: center; vertical-align: middle;">The LPCCC reviewed</td> <td style="width: 30%; text-align: center;">Fish Monitoring Update – Ken Davis</td> <td rowspan="5" style="width: 10%; text-align: center; vertical-align: middle;">Patterned Calendar</td> </tr> <tr> <td style="text-align: center;">Wildlife Report – Melanie Truan</td> </tr> <tr> <td style="text-align: center;">Nursery Operation Updates – Amy Williams</td> </tr> <tr> <td style="text-align: center;">Interagency Communications - Streamkeeper</td> </tr> <tr> <td style="text-align: center;">Riparian Diversions - Streamkeeper</td> </tr> </table>	3	The LPCCC reviewed	Fish Monitoring Update – Ken Davis	Patterned Calendar	Wildlife Report – Melanie Truan	Nursery Operation Updates – Amy Williams	Interagency Communications - Streamkeeper	Riparian Diversions - Streamkeeper
3	The LPCCC reviewed			Fish Monitoring Update – Ken Davis		Patterned Calendar			
				Wildlife Report – Melanie Truan					
				Nursery Operation Updates – Amy Williams					
				Interagency Communications - Streamkeeper					
		Riparian Diversions - Streamkeeper							
5	Streamkeeper Report: The Streamkeeper gave a brief report.								
6	Member Reports: Patrick noted the expansion of Putah South Preserve upstream - south side								
7	Correspondence: Letter to Valerie Whitworth was noted.								
8	Next Meeting: The LPCCC will hold a Decision Meeting of the Lower Putah Creek Coordinating Committee on Thursday, March 14 th at the Davis Parks and Recreation Training Room, 1818 Fifth Street, Davis from 3:30 to 5:00 PM								

Attendees: Harold Anderson, John Vickrey, Felix Riesenber, Dennis Kilkenny, Steve Culberson, Roland Sanford, Andrew Fulks, JD Kluge, Patrick Huber, Justen Cole.
Quorum: Yes.
Staff: Chris Lee, Nina Levin, Rich Marovich, Nicolle Herr.
Consultants: Ken Davis, Melanie Truan. Contractors: Kent Anderson, Amy Williams.
Public: Jeff Tenpas, Maura Metz.

Z:\CHRON\2019\LPCCC\FEB\2019-02-14 AGENDA.DOC

810 Vaca Valley Parkway, Suite 203, Vacaville, California 95688 ♦ Phone: (530) 902-1794 ♦ Fax: (707) 451-6099
[http:// www.watershedportals.org/lpccc](http://www.watershedportals.org/lpccc)

*The Lower Putah Creek Coordinating Committee consists of:
 Cities of Davis, Fairfield, Suisun City, Vacaville, Vallejo and Winters; Counties of Solano and Yolo;
 Solano and Yolo Riparian Landowners; Maine Prairie Water District; Solano County Water Agency;
 Solano Irrigation District; Putah Creek Council and University of California, Davis*

LPCCC Board Meeting February 14, 2019

1. Public comment

None

2 Approval of minutes

Herb: Are the people attending still on this?

Rich: I will check and add people if needed

Approved

3.

A. Fish monitoring update:

Ken Davis:

I have been looking at Putah Creek and other watersheds

I want to give things other than numbers, management options as well

- Monitoring
- Health
- Cobble
- Sites spawn
- How soon spawn
- Macro-invertebrates
- Other wildlife
- Juvenile salmon

Salmon surveys

There have been bald eagles feeding on salmon

Herb: I see them every year on my property

Ken: They are feeding on salmon and keep returning

- Butte creek, too many fish, embedded cobble
- Bear seen in Butte Creek
- Sockeye salmon in Whiskey Town
- Same problems
- Embedded, sand
- Compare Washington and Canada and Bristol bay

Putah Creek:

- 2019 Solano mussel plan to prevent mussels getting in, must be written out for funding
- SCWA video on HCP project
- Fairy shrimp seen at Peterson ranch
- Macro invert survey sensitive mayfly inventory
 - I will put together a list for Rich

Salmon run:

- Report will be done
- Cobble below weir
- Open and ready to receive eggs

Monitoring requirements for scarification plan

- Found embedded clay pan: watched salmon spawning, salmon eggs flowing down, not a good place to spawn
- Cementation of sediment
- Salmon can't get through, only dig a couple inches, after scarification they can go feet
 - baskets with rocks okay to use
 - best done by operator
 - much better spawning habitat now
 - cobble size imperative-Salmon armor redds with bigger cobble to protect from high water and a good place to hide juveniles
- Benefits: Open cobble, water flows through, when alevin hatch, they get down into rocks and hide until they venture out
- Protects invertebrates: flathead mayflies are sensitive to pollution, and I found them in Putah Creek

Salmon:

- 554+ counted, not counted ones dragged out by scavengers.
- Didn't go below 505 to count salmon only between 505 and diversion dam
- Probably closer to 700 when salmon below 505 are counted (e.g. by UCD)

Monitoring:

- Scarified areas narrow and shallow
- Narrowness is correct, faster, cobble cleaner, less mud snails, healthier for salmon
- Spawn quickly after arrival
- Dig redd in a few hours, some up to two feet deep
- Juveniles stay 12 + months
 - Can make an area to attract them for refuge

- Juvenile salmon from 2017 stayed until this year, hang out with spawning salmon, wanting to eat eggs

Herb: The white on the fish is from knocking scales off?

Chris: Could be fungus, they stop eating, bodies deteriorate during their trip up.

Scavengers

- 200 fish in system, scavengers take them, then we see carcasses
- 40 to 50 vultures scavenge every day
- 2019 flood conditions
 - Important questions

Herb: What's the plan for scarification now?

Rich: Project is winding down, but we were granted \$50,000, and had trouble spending it. We haven't decided funding to continue after this year, but the cost is low.

Herb: Can we go back to the same site; how do we know how sustainable it is? Do sites turn back to hard cemented conditions?

Ken: The areas are being monitored and mapped

Herb: In regard to the size of the cobble: In places where there's considerable cobble, and fine gravel, are there reds in both?

Ken: Both, but why do they choose to spawn there? They go through sand and down to gravel. In a couple areas they did this same way, if they can get through it successfully, they do.

Herb: Is the spawning habitat not limited there?

Ken: I'm not sure if it's successful.

Steve Culberson: Is there a schedule for when work will be done? Or does it just happen when you get the chance?

Rich: Ken identifies a suitable spot and how to monitor for a result, then do the intended work. We want to fund more monitoring, because we learn so much from him. The salmon season starts November 1st, so we need to have scarification work done before that like October, or maybe earlier.

Ken: We're always worried about bird surveying, permit limits, other encumbrances: we started late, only one guy doing it, has to be perfect, must be there watching, biologist on site, and we have to stop if there are critters around.

Steve Culberson: I'm trying to get a sense of how it is done, do landowners know when the excavator will be there?

Ken: It happens so fast, but we try to.

Dennis Kilkenny: Any time they are on private property, they let us know.

Andrew Fulks: Can the same work be done with a team of people?

Rich: The cementation can be 8 inches thick, it's hard to get through, and the layer is so hard to penetrate, it requires at least a mid-size excavator

Chris Lee: Putah Creek Trout improved spawning habitat by removing aquatic vegetation [not cementation] by hand with 20 guys and got done 100 square feet in 12 hours. This method is 100 times more efficient.

Ken: We will monitor banks, so no damage is done by the excavator, and we will fix any damage if it is done.

B. Wildlife Monitoring Update

Melanie Truan:

- Have been Biomonitoring the area for 20+ years, so we have large data sets
- 100,000 records: birds, mammals, amphibians, reptiles, or other organisms
- Seasonal bird surveys, breeding bird cycle every river mile, great indicator of river function
- Mammal and herp transects, bat acoustic surveys
- Vegetation surveys every 7 years, 16/17 different sites % cover, structure

Prop 1 process:

- Advice and consulting
- Track projects,
- Make recommendations and make management plan

Research: Camera traps, special projects, restoration outcomes, spatial analysis

Putah Creek Nestbox Highway 20-year anniversary will have events

Invite the public to enjoy, so many birds on Putah creek looking for places to breed, may put some up in parks

Biodiversity:

- Some species rich, some not so much.
- It shows how many are native and not native.
- The species all occur, not all in high numbers, so there is lots of room for improvement

Patrick: Is there a sense of extirpation rates? Historically?

Melanie: We have lost a lot, amphibian loss is high. They can't tolerate modern conditions. But many birds remained extant, while plants are highly invaded.

Patrick Huber: I'm just trying to get a sense of restoration

Melanie: There has been reintroduction of plants

Juvenile great horned owl fledged at Winters Putah Creek Nature Park and with all the commotion and noise, it doesn't seem to be scared of people

Mammals:

- 39 species 77% native, like Sacramento Red Fox, and mountain lions
- 15 different species of bats
 - nurse 1 pup per year
 - consume lots of crop pests
 - can consume 1000+ mosquitoes in an hour

Amphibians:

- 4 species, skin permeable and therefore susceptible to toxins
- Reptiles standard, need to find more
- Pond turtles everywhere, especially basking sites

Habitat restoration:

Reconciliation means taking what we have including constraints and making the best habitat we possibly can

Goal:

- To have multiple habitat types
- Phase three use rainwater and backwater channel
- Backwater much wider and deeper,
- Much opportunity to contour banks and let vegetation fall in
- Create heterogeneity in pool,
- Eucalyptus can fall in and help form islands, good cover for juvenile fish

My hope for site:

Critters benefit, turtles, fish, Black Phoebe, trees can be for nesting, and organisms take advantage of messiness

Planting nodes:

Have a drawing of an idea:

- a central tree
- grasses and forbes, sealed off from trails with shrubs and brambles

- in areas where people and animals can't get to
- beavers won't go in
- gives new plants a chance

Reconciliation: how can we best take advantage of situations, and hopefully try it out

Sandpiper came into the area, and they are not usually seen here. It came in to hang out and take advantage of invertebrates, and can turn over stones

Herb: In regard to wildlife plantings and sycamores, I haven't seen any

Melanie: There are just a few along the creek, and they have been documented

Herb: Can I have a copy of that slide with the drawing please?

John Vickery: Is this just above the floodplain?

Melanie: Yes, up to the levees. We need to look at soil composition and hydrology and adjust planting mix to accommodate

John Vickery: I don't see quailbush? Is it not prevalent?

Melanie: This is just a few examples, Craig and Amy have the master list of all plants

John Vickery: It's great habitat for cottontails

Ken: How far quailbush?

Melanie: Far, as long as conditions are good

Rich: They can be invasive and not native to this area. It is a practical plant and we could consider using it.

Melanie: The thing about writing a reconciliation plan, is that you can be writing it as you go

C. Nursery updates:

Amy Williams:

- Halfway through nursery contract
- 22 events since July 1st
- One creek internship
- 78 volunteers, 139 participants, 372 volunteer hours, adding up to \$10,000 dollars
- 24 interns, 205 hours, volunteer education

- 'recipe cards' with propagation protocols for people working with seeds or plants for the first time
- 4,078 plants sold, LPCCC projects, other organizations getting plants for projects, RCD, UCD, Napa county, city of Davis, cache creek conservancy,
- \$17000, over 4000 plants have gone out of the nursery
- Hoop house gone up, SCWA interns, stewardship team and volunteers helped take down and put up
- CalFIRE renovating glass house
- Helped plan open house event for them

Herb: What is the status on hoop house?

Rich: We are almost done, just need to put the ends on

Herb: When will it be in operation?

Rich: A few weeks

Herb: We should have an LPCCC meeting there and have a tour there.

Rich: For the inside benches:

- Stacking pallet frames will be cut down to bench height
- Use Plastic pallets as decking
- Reused materials to make nursery benches
- Pallets can go directly on mulch floor maybe for trees to grow higher? But we may ultimately put them on benches
- Frames are a government surplus item
- Pallets are from an industrial source

D. Interagency communications

Streamkeeper:

- Met with Meegan Nagy (formerly of USACE, now with RD108) to ask questions about federal permitting
- McCune creek restoration projects coordinated with NRCS
- Soups-On fundraiser for PCC was very successful
- Wragg fire remediation continuing, need consultant support for federal contracting
- Attended workshop for Urban Greening grants

E. Riparian diversions

There are 14 pumps, and the plan hasn't changed in a few years, but it's good to meet with everyone, and good cooperation/representation makes things work

Patrick: Why are there so many at the end of the creek?

Rich: Down near Los Rios Check Dam, they are reusing water out of Toe Drain, and diverting it for agriculture including a network of channels that reach almost to Mace Blvd

- Good compliance
- Worked well for the farmers last year
- 1 flow violation in 2018
- 3 perfect years before that

Berryessa numbers: 6 ft below glory hole, more like five or four, chances of spill very realistic

5. Streamkeeper report:

Rich: There is lots of water out there, and not much field work going on. We've been working at nursery and repairing equipment and getting ready for next season. The City of Winters is getting serious about Arundo control, however if it's on agriculture land it's not as easy to regulate, but if there is a fire it is dangerous. The City of Winters has funds to help control Arundo

6. Member reports:

Patrick: We have a new area to explore upstream of the South Fork on the South side, upstream.

7. Correspondence:

Rich: I sent a letter to Valerie Whitworth to reassure her that we won't be doing any work without her written consent, and that we are responding to her concerns.

8. Next Meeting

Next meeting is an LPCCC decision meeting, on Thursday March 14th in the Davis Parks and Recreation Training Room, 1818 Fifth Street from 3:30-5:00 pm. There is limited parking up front but plenty of extra parking in the rear, just do not park in the numbered spaces. Any non-numbered space is open to the public. Remember to sign in at the front desk.

