

# Knightsen Wetland Restoration and Flood Protection Project

Public Meeting #1

2 May 2018

7 – 8:30 pm

## Meeting Notes:

### Introductions:

ECCC Habitat Conservancy – Abigail Fatemen

East Bay Regional Park District – Carlos Lare-Masters

Knightsen CSD: Al Simas

CCC Flood Control District: Mitch Avalon; Shai Ehrmann

Supervisor Diane Burgis's Office: Mark Whitlock

ECCC Habitat Conservancy's consultant for the project, ESA: Mark Lindley, Eve Pier Kieli

### Lead Agencies

East Contra Costa County Habitat Conservancy

Conservancy Focus:

- Land restoration
- Habitat restoration targeting threatened and endangered species

East Bay Regional Park District

EBRPD focus:

- Land conservation
- Recreation
- Preservation of cultural resources

### Meeting Goals:

Introduce the project team and project

Provide an opportunity for meeting participants to:

- Share information about site history
- Identify issues project team should consider in planning the project
- Provide an opportunity for members of the community to raise questions/make comments early in the project process (before design alternatives are developed)

Currently in Knightsen there are 2 projects:

- Habitat Conservancy/EBRPD Restoration Project
- Knightsen CSD Flood Protection Project

This Meeting is about the Restoration Project

Primary Purpose is Habitat Restoration

Wetland Restoration is focus. Project will be designed to:

- Benefit endangered species – sensitive habitats
- Receive flood runoff from Knightsen
- Provide recreational amenities
- Improve Delta water quality

Funding:

ECCC Habitat Conservancy, East Bay Regional Park District, State and Federal grant funds.

Q: Is there a hydrologist on the team

A: Balance Hydrologics is team hydrologist

Q: How is Conservancy getting funding for this project?

A: Conservancy has been awarded grants for the project.

- State and federal grant funds
  - Planning is funded under Prop 1 CDFW grant
  - Design and permitting (next project Phase) has been awarded a Prop 1 Delta Conservancy grant
  - Conservancy will be seeking additional funding for project construction

Q: On what basis (qualifications) are grants being awarded?

A: On the basis of project expected benefits -- endangered species and wetland habitats are a high priority for funding agencies especially in the Delta.

Q: Is this project/funding ties to the twin tunnels project? Prop 1 funding is a linkage. Are you accepting soil from the tunnels to build this project?

A: The funding is for habitat restoration – we anticipate balancing cut and fill on site (no import or export of soil/sediment). This wetland project doesn't have a connection with the tunnels project.

Historical Ecology:

Project will restore the types of habitats that were historically present – not same extents or configurations – not feasible given modern conditions, surrounding land uses – will use historic ecology as clues to what will work now – Team conducting studies to inform design

Based on historical ecology, site presents opportunities for restoration of:

- Tidal marsh
- Alkali meadow
- Oak savannah
- Dunes

Q: Does Conservancy “want to stop farming”?

A: “want to stop farming” is mischaracterization of the goals of the project. Farming will continue on the site for the next 3 years (there is a 4 year lease). On the restoration project site irrigated ag use will be discontinued with commencement of project construction. There may be grazing if it is compatible with the final project configuration.

Currently the farming use continues, Nunn has lease and is farming – irrigation and pumps still functioning as prior to purchase.

Q: What point in history is the target for restoration?

A: Not sure yet, not pre-settlement conditions. This would not be feasible. Project will be designed to be compatible with current site conditions and surrounding land uses.

Q: What will construction entail?

A: Earth moving, to recreate conditions similar to support native plants and wildlife. Though we don't have a project design so all elements of construction haven't been figured out.

Q: Will the project be like Big Break?

A: The project is not planned to have a large visitor center or intensive use.

### Recreation

Q: Where are you planning to put entry points? Delta Road? Byron Hwy?

A: Still looking – possibly a non-motorized boat launch on No Name Slough.

Feedback thus far has been that community does not want to bring lots of people here. So we will work with EBRPD to discuss recreational amenities that will not draw crowds.

Comment (Eagle Lane resident): ECCID easement- Eagle Lane residents have an access easement to No Name Slough – was supposed to be boat launch but bank is rocky and inaccessible –this is NOT for EBRPD's use and not public. Eagle Lane is a private Road, not County maintained.

A: Any access would be on Nunn property.

Comment: Wetlands will bring kayakers and others – will impact our lives especially on east side of Eagle Lane. Residents on waterway are already having problems with people coming in, 'partying', leaving trash ... Also dumping of all sorts of debris including dead animals.

Comment: The existing ag workers also leave trash at the site.

Eagle Lane resident comment: Project should not bring people onto private property on Eagle Lane.

Comment: Knightsen is severely underserved by FD and Sheriff. We are concerned about bringing public to the community.

There used to be a 'slough' next to Eagle Lane (dry now); people used to kayak from there to Discovery Bay. BIG CONCERN that boat launch will bring a lot of public users.

Q: Will there be horse trails?

A: Yet to be determined. Conservancy is not designing public access – EBRPD is handling the recreational components and we will work together.

Q: Will EBRPD determine what kind of public access – entry points prior to project construction? What is the process?

A: Recreation planning will be separate process – like what is occurring now for Black Diamond Mines – EBRPD is expanding the LUP (Land Use Plan) to accommodate changes to recreational uses. Recreation (if any) for this property will be limited to those types that are compatible with habitat and species – so low impact.

Q: Will there be camping?

A: No camping or overnight use is planned for this property.

Q: Why are you planning this project on a site that currently doesn't have wetlands/water on it, instead of a property that already has water/wetlands?

A: Site presents a lot of opportunities both for restoring native habitats to support threatened and endangered species, for ameliorating drainage/flooding issues for the community, and improving water quality (flows back to No Name Slough and Delta waterways).

#### Hydrology/Flood Protection/Drainage Enhancement

Drainage from the community of Knightsen all runs to the Nunn property (project site) – via a convoluted path: through the culvert under RR tracks to Byron Highway ditch, then north along Byron Hwy ditch to Delta Road ditch, then east along Delta Road ditch (frequent flooding in/following storms) to eastern boundary of the site, into onsite ditch that runs to the south and eventually to southeast corner where it is pumped into No Name Slough (3000gpm pump). The plan is to drain runoff more efficiently onto the Nunn property – take flows more directly from Byron Hwy onto the site near the southwest corner of the site.

Al Simas (Knightsen CSD): In the heavy winter of 2016, CSD added 3000 gpm pump right next to the Nunn pump = together pumped 6000 gpm 24/7 for 1 entire month.

Comment: Resident – You have the drainage pattern wrong – water does not drain past the RR culvert– flow does not occur as you have described. You need to collect more site specific data on drainage. Also need to collect more info on flood zones – 100-year flood demarcation runs along Byron Hwy. Will the project change the 100-year flood area? Will properties be re-mapped? Some residents are in 100-year flood zone. Show the post project 100-year flood on a map of the community.

The Irrigation District has a subdrain(s?) (tile drain) that affects the hydraulics in the area – you need to consider this in the design.

Also very important: Study the impact of standing water on the shallow groundwater on properties surrounding the site – groundwater table is only a few feet (3 – 4 feet) below the ground surface - everyone already is on aboveground septic. Need to look at effects not only on average annual levels but also in the 2 weeks around storm events.

Q: How will bringing in tidal marsh impact ground water salinity? Look into potential impacts on wells (well water quality).

Comment: From resident lives at Eagle Lane (“Eagle Annex”); south of south project boundary (pointed out her property on the map – directly x the road from southern boundary) Ditch along Eagle Lane are undersized to handle the water pumped into it from Eagle Lane properties - contribute drainage to the onsite ditch along south boundary.

A: Plan is to design the project to route runoff from those properties also – to get drainage into seasonal wetlands or swales to use ‘nuisance’ runoff that overflows ditches etc. and use it to benefit habitat... would like to run storm flows and urban runoff through vegetated swales and/or seasonal wetland features that would serve to treat this runoff through biological processes before flows eventually leave the site (via infiltration or flow out with tides or pumping)

Comment: Bringing wetlands to the site will bring more mosquitos – A lot of dead West Nile Virus infected birds are found along Eagle Lane every year.

A: ESA met with CCCMVCD and have been provided with design criteria to minimize mosquito production, e.g. duration of ponding, water circulation/flows, and seasonal conditions. The project designers will continue to work with Vector Control.

Comment: Big Break built a big perimeter fence. I currently have a view across the property - I don’t want fence blocking our view of the property.

A: we do not anticipate constructing a fence.

Comment: The Project will directly affect our daily lives – our property values. Will the project raise property taxes?

A: We are not experts on property taxes.

### Project Process

Q: Will there be an EIR? That process will be an opportunity for residents to object – challenge the project

A: There will be CEQA document – but the Conservancy wants to hear community input on design much before that – this is a first meeting focused only on this project, there have been past meetings that were part of a larger CSD meeting agenda –we are still gathering information for design. Later there will be another meeting where we will present some design concepts to get your input to help shape project elements and overall design.

Q: Can you site examples of built projects like this so we can see for ourselves what it will look like?

A: Hard to think of similar project in terms of size and habitats on the spot. Dutch Slough Restoration (larger but nearby) is breaking ground tomorrow. Bay Point Restoration is in planning process - closer to construction than this project. Hamilton Wetland Restoration in

Novato was completed in 2014. That project is far larger and is a tidal salt marsh restoration – lands were subsided so large volume of dredged sediments were transported to the site to raise elevation to restore salt marsh habitat. Possibly the Martinez shoreline. We will try to identify better representative projects and provide information.

Martinez Regional Shoreline

<https://www.regionalparksfoundation.org/document.doc?id=258>

Hamilton Wetlands Restoration Project

<https://hamiltonwetlands.scc.ca.gov/>

Bahia Marsh Restoration – East Bahia Peninsulas are a smaller (& earlier) version of what might occur on the East Parcel. East Parcel will be much larger with more habitat complexity.

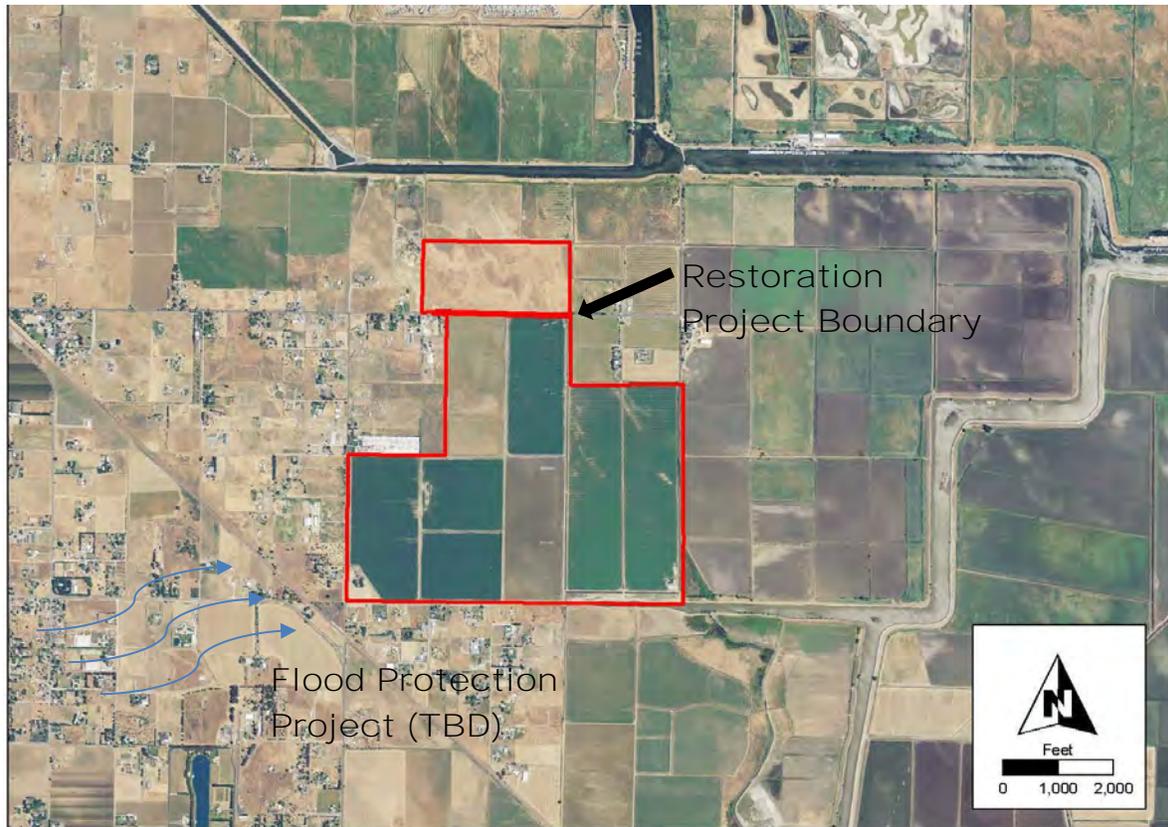
<http://www.sfestuary.org/our-projects/habitat-restoration/bahiamarsh/>

Q: How long will construction last?

A: Hamilton wetland restoration lasted 3 summers but that project, as stated, was more complicated project that was tied to Oakland Harbor dredging. The construction for this project could take 2 summers or 1 (Construction will not occur in rainy season, so multiple limited time frames rather than continuous construction, so it could take 2 seasons).

Comment: This is one of many projects – all take taxpayer money – grants are not free. Knightsen has no Fire Service, EBRPD has own Fire Department. County money should go for fire and police protection.

**Knightsen Bio-Filter Concept**  
**Restoration Project and Flood Protection Project**  
Updated May 2018



Working to improve flood protection has been an important, long-term endeavor for the community of Knightsen. After the flooding in 1997, work began to define a project that subsequently became known as the Knightsen Bio-Filter. The community has reached several milestones over the years in moving this project forward, including a 1998 drainage report, 2002 feasibility study, 2013 restoration study, and formation of the Knightsen Community Services District. The East Bay Regional Park District now owns a large property on the east edge of town and is interested in restoring it. The Knightsen Bio-Filter has since morphed into two separate projects.

**Restoration Project.** The property, outlined in red above, was acquired for the Park District by the East Contra Costa County Habitat Conservancy, who will also be managing the restoration project. The historic Delta shoreline bisects the property allowing restoration of tidal wetlands on one side, oak savanna on the other side, and alkali meadow habitat in the middle. There are also rare inland sand dunes on a portion of the property that offer unique habitat restoration opportunities.

**Flood Protection Project.** A good portion of stormwater from Knightsen drains towards the Restoration property, but not in an efficient manner. Undersized drainage pipes and a circuitous drainage route result in floodwaters backing up and community flooding. The Flood Protection project will upgrade certain drainage pipes and provide a more direct route to the Restoration property. These improvements will reduce community flooding. Once stormwater enters the Restoration property it will flow through the wetlands and be naturally treated before entering No-Name Slough.

# Knightsen Wetland Restoration and Flood Protection Project Public Meeting



Date: Wednesday, May 2, 2018

Time: 7 p.m. - 8:30 p.m.

Location: Knightsen Farm Bureau - 3020 2<sup>nd</sup> Street

## Lead Public Agencies Land Acquisition and Restoration Project

### East Contra Costa County Habitat Conservancy

- Land conservation
- Habitat restoration targeting threatened and endangered species



### East Bay Regional Park District

- Land conservation
- Recreation
- Preservation of natural and cultural resources



## Meeting Goals

**Introduce the project team and project**

**Provide an opportunity for meeting participants to:**

- Share information about site history
- Identify issues project team should consider
- Provide an opportunity for public comment ahead of developing restoration alternatives



## 2 Projects

**Knightsen Wetland Restoration Project**



**Knightsen CSD  
Flood Protection Project**



## Knightsen Wetland Restoration Project

**Primary Purpose is:**

- Habitat restoration

**Additional goals are:**

- Receive run-off from Knightsen to support flood protection project
- Recreation opportunity
- Improve delta water quality

**Funding:** ECCC Habitat Conservancy, East Bay Regional Park District, State and Federal grant funds.



## Knightsen CSD Flood Protection Project

**Primary Purpose is:**

- Drainage Improvements and Flood Protection

**Additional goals are:**

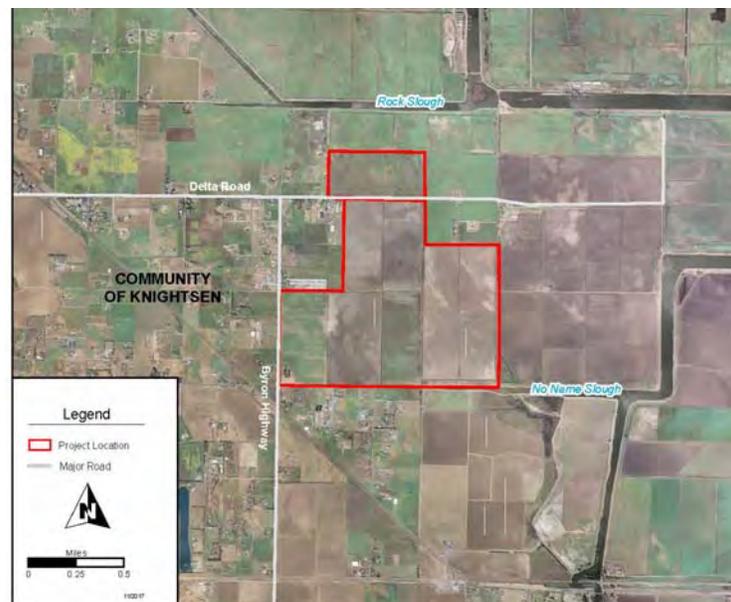
- Coordinate with the Wetland Restoration Project to move water more efficiently out of the community.

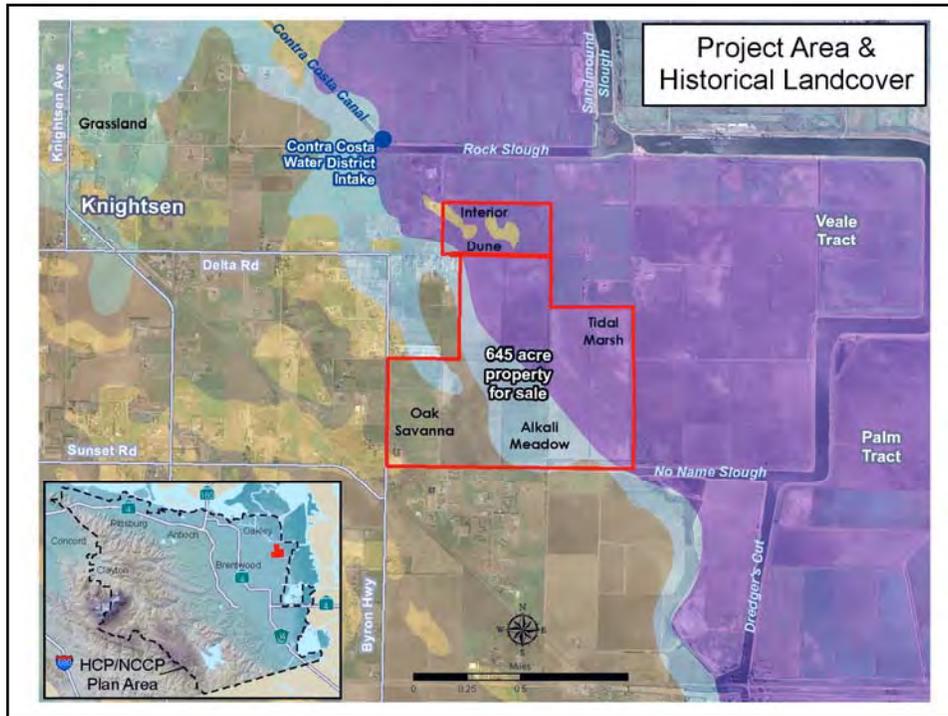
**Funding:** Knightsen CSD, State grant funds



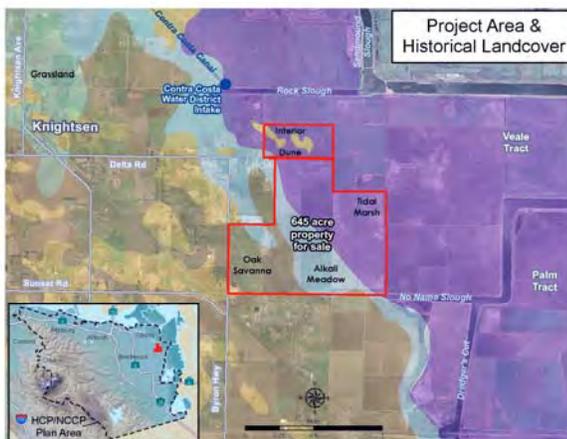
Questions?

## Nunn Property





## Habitat Restoration Opportunities



- Tidal Marsh
- Alkali Meadow
- Oak Savanna
- Sand Dune

## Tidal Marsh Habitat



## Alkali Meadow and Seasonal Wetland Complex



## Interior Sand Dune Habitat



Remnant Dunes on Nunn



Antioch Dunes

## Oak Savanna

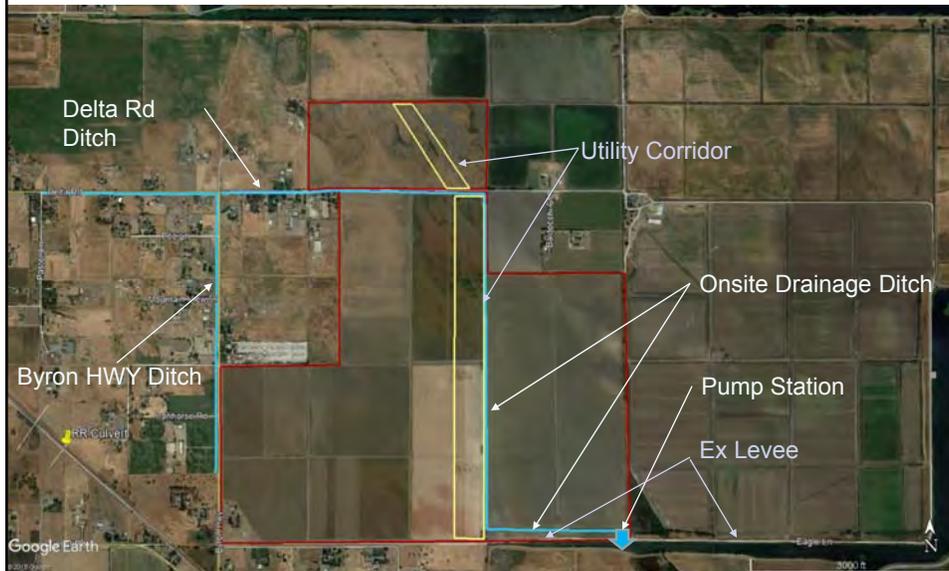


## Unique opportunities for Natural and Community Benefits

- Wildlife and Habitat Restoration
- Recreation
- Flood Safety
- Water Quality



## Nunn Parcel – Existing Functions



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Abigail Fateman  
East Contra Costa County Habitat Conservancy  
[Abigail.Fateman@dcd.cccounty.us](mailto:Abigail.Fateman@dcd.cccounty.us)  
925-674-7820

