Alhambra Watershed Council Meeting Minutes

Tuesday, Jul 1st, 2025
6:30 pm – 8:00 pm
ZOOM MEETING LINK:

https://us02web.zoom.us/j/85237702240?pwd=MEFIRlRMM2dYclRqTHE5T2hnQlRMdz09

Meeting ID: 852 3770 2240
Passcode: 652371
Dial In Number: +1 669 444 9171

Attendees: Mitch Avalon, Jamie Menasco, Trevor Rice, Elaine Jackson, Jason Alexander (NPS), Doug Burgess, Igor Skaredoff

6:30 Introductions and Partner Reports

Jason Alexander - Water Resources Division of NPS, water rights division, internal consulting for NPS units on different issues with rivers, sediment, watershed processes, with USGS before NPS, before that did private consulting, background in fluvial geomorphology

Friends of Alhambra Creek

- Great Kiwanis meeting - Jane gave talk on early days of FoAC
- Going to do 4th of July parade
    - Be there 9:00 or 9:30
- Starting on Arundo donax project
    - Looking at sites
        - Site on Alhambra near Les Schwab Tires
        - Another site by Senior Center
    - Looking to work with Civicorps to do labor - Bob looking into this
- Elaine mentioned AQMD survey Trevor sent out
- July 19th - Moorhen Marsh follow up event
- Elaine to send out AQMD survey

National Park Service

- Lost one and are losing second ranger - Nikko found private sector job, cannot rehire for that permanent position
- Claire at John Muir also found new job
- Counted 12 Alameda whipsnakes this season
- Vegetation map available for the Bay Area
    - pacificvegmap.org
    - Completed at the end of May

Contra Costa Resource Conservation District (CCRCD)

- Beaver Festival
- Pinole Pilot continuation
- Kiwanis check pickup for pollinator plantings
- **Gone July 15th-August 5th**
    - **Can be here for meeting**

Mt. View Sanitary District

Other member reports

7:00 Discussion Items:

- Developing sediment source analysis project—discussion with guest Jason Alexander (hydrologist/geomophrologist in NPS Water Resources Division)
    - Mitch characterized the sediment issue in Alhambra Creek Watershed for Jason
    - City clearing out sediment causes a lot of disruption
    - Need to define a scope of work for a study
        - None of us have done that
        - Some done nearby, e.g. Pinole
    - Jason explained the different options for sediment source studies
        - One very quick way is to do lidar differencing
        - There are two lidar sets for the watershed, about 10 years apart
        - Good place to start since data is already available
        - Even if imperfect could tell you where more erosion has occurred than other places
        - Erosion sources typically things like landslides, hillslopes, gullying, bed erosion
        - Taking topographic differences is a good first step - could give initial look to determine what we would want to study
        - Sediment studies can be deep rabbit holes and take deep pockets
        - Jason would start with the lidar since we have at least two lidar datasets
    - Jason - sediment is tricky because it often comes in discrete events (like a single rainstorm)
        - Small portion of watershed could be producing a large portion of sediment
        - If that isn't the case, geochemistry could be helpful (if sediment more diffuse)
        - Lidar could help focus on smaller subwatershed if data indicates that sediment source is concentrated there
    - Trevor - focus is on addressing problem specific to downtown reach that City continually dredges
        - Would lidar catch the tidal contribution to sediment in the downtown reach in question?
        - Is lidar the first step and then we go beyond that?
    - Igor - cost to City is not only driving force
        - Effect on habitat is another concern
        - Encouraged by Jason's description of comparative lidar

        - How does it work?
    - Jason - there's open source, free software available
        - Able to lidar scan with IPads now
        - Topographic differencing software requires knowledge but there's no cost barrier
        - May tell you its all coming from one spot, or problem may be more diffuse
        - Deposition could be coming up from Bay (coastal erosion)
        - Fan delta for Alhambra Creek may indicate that it's erosional
        - Lidar differencing would be great place to start
        - This first step could help to focus future study design, would strengthen basis for a study design
    - Mitch - is something a graduate student would be interested in?
    - Jason - software is called Geomorphic Change Detection
        - Even good undergraduate at Berkeley or another school could do it
    - Igor - would we be able to do it?
    - Jason - yeah, there are enough online resources
        - Offered to take a first cut at it, might take a couple weeks
        - Could investigate initially to see if it's worth doing
    - Doug - where are these datasets hosted?
    - Jason - USGS has a lot of them
        - USGS's 3D elevation program consolidates lidar data
        - At least two sets available for Alhambra
            - Something like 2009 and 2017
    - Trevor - does Jason have access to any documents that could help the Council to develop a study?
    - Jason thinks TEX approach looks good
        - SFEI does good work, good source of reports
        - Jason likes their field approach
        - Those are good sources of information, especially since they're local
        - Can point us to review papers on sediment fingerprinting
            - Would move to this if lidar differencing was not pointing to any particular spot
        - Also cheaper ways to do lidar flights in small areas using drones, cold hire contractor to do it
        - Also willing to review or add to any scope of work we want to write
    - Mitch - geochemical testing could be pretty cost effective?
    - Jason - difficulty is identifying lab to do the geochemistry
        - $100-$120 per sample 5-6 years ago
        - Need about 30 samples per source
        - Sources differentiated by soil type or land use
    - Igor
        - We've been framing this as a problem of the cost to the City, but there is also the cost to the land where the erosion is coming from
    - Jason - important to remember that erosion is also natural (natural

background level)
        - Where it's over natural background level, the ecosystem is degrading
        - Important to control to heal the landscape
    - Jamie - are sediment fingerprinting and geochemical studies the same thing?
    - Jason - sediment fingerprinting is a broader term, might not need to look at chemistry (e.g. grain size) - this is not very common
        - Geochemistry studies – looking at bulk geochemistry from various sources
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- Updating AWC project list spreadsheet with sediment source analysis projects

8:00 Adjourn

Action items:

- **Jason Alexander to take first crack at lidar differencing for Watershed, potentially within the next few weeks**

The next meeting of the AWC will be on Tuesday, August 5th, 2025, at 6:30 pm.

For questions regarding the AWC or to suggest agenda items, please email Evan Green at egreen@ccrcd.org

The Alhambra Watershed Council is a stakeholder group dedicated to protecting and enhancing the health of our watershed by educating ourselves and the public about the watershed, providing a forum for new ideas and projects, and acting as a community resource.