STAKEHOLDER WORKING GROUP Meeting Summary

ATTENDEES:	Chuck Eckart, Pt. Reyes Village Assoc. Amanda Eichstaedt, Business Community Dan Dawson, Marin County Department of Public Works Curtis Havel, Senior Planner, Marin County Planning Department Cathleen Dorinson, Main Street Moms Lynn Stray, Farming Community Brannon Ketcham, National Parks Service/Pt. Reyes National Seashore Joy Lee, Caltrans, Project Manager Manny Caluya, Caltrans, Chief, Design North Eric DeNardo, Caltrans, Branch Chief, Marin & Sonoma Counties Chris Pincetich, Caltrans Biologist Shannon Fiala, California Coastal Commission Jodi Ketelsen, CH2M, Environmental Generalist and Facilitator Jasmin Mejia, CH2M, Environmental Planner Yassi Sarvian, CH2M, Environmental Assistant
COPY TO:	Yolanda Rivas, Caltrans Branch Chief, Environmental Analysis Stefan Galvez-Abadia, Caltrans, Office Chief, Environmental Analysis
PREPARED BY:	Jodi Ketelsen, Yassi Sarvian and Jasmin Mejia
DATE:	April 26, 2016
PROJECT:	ID: 0400001986 – EA 0G642

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Objectives

Caltrans formed a Stakeholder Working Group (SWG) to gather focused input from the Point Reyes community representatives in the development, refinement and screening of alternatives for the proposed Lagunitas Creek Bridge Project. The objectives for the **third** SWG meeting on April 26, 2016 were as follows:

- To review the contents and action items from the February meeting
- To explore cost comparisons for each bridge and associated construction methods
- To compare alternatives to provide Caltrans with a recommendation(s), which will help Caltrans narrow the reasonable range of alternatives

Action Items

Action items and suggestions are shown in bold italics within each discussion topic summarized below.

I. Recap February Meeting

The meeting started off by reviewing the outcomes from the February meeting and action items that have been developed over the course of the first two SWG meetings. The Facilitator noted that the SWG's request to include shoulders north of the bridge which would include widening the overflow

culvert has received support in Caltrans. The widening or replacement of the culvert and connecting shoulder will be studied in the environmental document.

The group talked about the potential acquisition of the proposed staging property to the northwest of the bridge and how to get in contact with the property owner; the Accelerated Bridge Construction (ABC) method is contingent on acquiring a temporary construction easement on these properties, so ***the SWG suggested contacting the Davey Tree Company since they have a PG&E contract to do tree service and park their trucks on the property.*** Other ongoing action items included reviewing the various bridge types and identifying potential project impacts, avoidance and minimization measures, and potential mitigation measures.

The Facilitator inquired about the public's response to the recent publication of the project newsletter distributed on March 22, 2016. The Facilitator explained that the second newsletter (upcoming in June) will continue to update the public on the discussions from the last two SWG meetings. The SWG members provided positive feedback; many reported that the citizens they spoke with were happy that they were being informed on the process and had the opportunity to review the information at their leisure. SWG members reported that there are still some citizens that would favor the retrofit alternative, despite the information provided in the newsletter, but most understood that it was a larger effort than originally thought with no improvements in safety. Citizens were also pleased that more newsletters would be published in the future.

The SWG members themselves were pleased that the newsletter provided the majority of context for the alternatives under review and allowed them to emphasize the fact that they are not designing the bridge, but providing input on various alternatives and the effects that they might have on the community. With respect to the potential 2-3 week bridge closure information in the March 22 newsletter, SWG members reported that some citizens did express their annoyance but when the SWG members reminded them that this option was better than a potential 3-year construction disturbance, they seemed convinced.

II. Cost Comparison

The Facilitator explained that the preliminary cost estimates for each of the bridge alternatives include roadway items (like paving, utilities, construction management, traffic, etc.), structural items (like building a detour bridge, piers, and new or rehabilitated bridge structure), right-of-way acquisition, and environmental mitigation measures. The Facilitator also clarified that the designs of the bridge alternatives are only at the conceptual design phase (around 5-15% level of design), so the costs were only intended for comparative purposes and therefore the actual dollar amounts are not available for review. Also, even though some alternatives were previously dismissed from further review, for documentation purposes, costs were developed for the retrofit and conventional construction for each bridge type.

A comparison relative to each alternative was provided in the form of a cost key (using dollar signs to indicate how much money a certain alternative would cost). With this in mind, it was demonstrated that the 3-span concrete bridge (ABC longitudinal move-in) alternative would be the least costly, the 3-span steel truss bridge (ABC longitudinal move-in) alternative would follow as the second least costly, while the suspension bridge would be the most costly of all alternatives – more than the conventional construction approach and the retrofit alternative. The Facilitator also noted that the retrofit bridge and conventional construction methods are higher in cost partially due to the fact that a detour bridge would need to be built.

The Facilitator reported that building a temporary detour bridge would be costly, since it would need to meet all the safety requirements of a normal bridge. The SWG asked if using a Bailey bridge (a type of portable, pre-fabricated, truss bridge) as a pedestrian/bike bridge during bridge closure would be possible. However, Caltrans safety criteria do not allow these types of temporary bridges to be used.

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SWG members requested that the bridge closure under the ABC methods try to avoid impacting high peak tourism which is generally March through October. They noted that closures in later October or early November would be preferable. The Caltrans biologist explained that fall closure may conflict with the allowable work windows permitted by the regulatory agencies to avoid and minimize impact on federally and state listed species. ***Caltrans will work with agencies to coordinate the best time for construction and bridge closure. The SWG suggested that perhaps the County and Caltrans could take advantage of the construction to relocate overhead utilities underground, as it would be helpful in the long run and from an aesthetics perspective.***

III. Project Alternatives Updates

Suspension Bridge

The Facilitator presented updated information from the bridge engineers. The Facilitator explained that some of the issues regarding the suspension bridge include the need for numerous piles on each side of the bridge; a foundation ranging between a 30-foot to 50-foot radius around each tower; a larger staging area; and the likely need to acquire private property adjacent to the bridge and relocate the current occupants. Additionally, the suspension bridge would not be viable for the ABC method of construction as previously hoped. Further, the SWG has expressed that the suspension bridge is not consistent with the scale and character of the community. ***Because of the potential impacts on the community, private property, and imprudent use of public funds (because the estimate is nearly three times the cost of the least costly alternative), the SWG recommended that the suspension bridge be removed from further consideration as an alternative to be carried further into the environmental review.***

Hydraulics Analysis (Piers versus no piers in the water)

A hydraulics analysis assessed the differences between the 3-span bridge (steel or concrete) and the full-span steel truss. The 3-span bridge types would have slightly larger piers in the water than the existing bridge along with abutments on the river banks, while the full-span bridge would remove all piers from the water and only have abutments on the river banks. The analysis sought to understand the effect of piers versus no piers in raising water levels in light of anticipated on sea level rise for a 100-year flood event, as well as the projected scour of flows on the river bottom.

The analysis demonstrated that there would be only a slight measureable change (less than ¼ inch) of water elevation due to sea level rise during a flood event. The hydraulic model finds that a typical 100-year flood event would have a water surface elevation of approximately 16 to 20 feet from river bottom at the bridge location, as compared to a modeled normal tidal high-water elevation of approximately 9 feet.

Over the next 100 years, sea Level rise is expected to change the height of a sea level by approximately 1 to 5 feet in the coastline near and around San Francisco[i]. However, from a hydraulics standpoint, the increase in sea levels do not significantly affect the water levels at Lagunitas Creek Bridge during a 100-year event because the water flows toward the sea are more dominant than the sea level downstream of the bridge. Therefore the hydraulics model showed that there would be no change in FEMA floodplain boundaries for any of the Alternative. The model showed that at the upstream side of the bridge:

- there would be only a minor rise in flood base elevation (under ½ inch) under the 3-span bridge alternatives, and
- there would be a minor drop in flood elevation upstream of approximately 1-5 inches, under the full-span bridge alternatives (no piers in the water).

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SWG members reported that the last flooding event on New Year's Day in 2005 did result in flows overtopping the bridge.

The Facilitator explained that Caltrans had reviewed flooding patterns which indicated that overtopping the river banks occurs further upstream and flooding was not induced by the bridge. Furthermore, the SR 1 roadway is typically flooded during these events, so raising the bridge by itself would not necessarily resolve accessibility issues during a flood. To fully clear the floodplain, the project limits would need to be expanded considerably to raise the roadway, which would result in changing many properties' access to a more inclined driveway and would potentially involve property encroachment, easements, and/or property acquisition. This would change the intent of the project and substantially enlarge the study areas and number of properties affected. Finally, the study showed that because the bridge's wider passage allow an increase the creek flows to pass, scour increases in depth. Scour can be mitigated with appropriate reinforcements at the base of piers and abutments.

The Facilitator concluded that this study does not force a decision to narrow the bridge alternatives further. Neither the single-span or three-span bridge types would result in substantially impacting hydraulic flows.

Updated Simulations and Dimensions of the Bridges

The SWG looked at the project alternatives and visual simulations. The SWG discussed the circulation patterns of pedestrians and bicyclists currently and in the future; it was clarified that lack of safe shoulder (and presence of deep ditches) currently forces bike and pedestrian users to move to the north and west sides of Sir Francis Drake Boulevard and SR 1 where a shoulder exists, albeit inadequate in some locations. ***(The SWG suggested that Caltrans be aware of this issue and clean up debris on the shoulders to improve the area.)*** The Facilitator noted that one SWG member wanted to make sure that a bridge design to last another 80 years should consider a sidewalk on both sides. The Facilitator suggested that if not now, is it possible that, sometime in the future, there would be a desire to have a sidewalk on both sides of the bridge; ***the SWG decided that two sidewalks would not be necessary, but they are open to having a wider sidewalk on the west side.*** A discussion ensued about the importance of maintaining Americans with Disabilities Act (ADA) requirements for sidewalks. If there is only one sidewalk, SWG suggested that widening it to more than 6 feet would be worth considering since this bridge will have a service life of about 80 years.

As part of this non-motorized access safety discussion, ***some SWG members feel that, at minimum, a crosswalk is needed, and maybe reducing the radius of the corner of Sir Francis Drake and SR 1 will prevent free right-hand turns that compromise safety of pedestrians and bicyclists on the shoulder of Sir Francis Drake. Finally, the SWG requested an analysis of the north and south approaches (including the area from the overflow culvert to town as well as the traffic at the Sir Francis Drake and SR 1 intersection) to fully understand how traffic would be affected by the proposed designs.***

The SWG reviewed updates to the following bridge alternatives:

- Steel Truss: 3-Span
- Concrete Bridge: 3-Span
- Steel truss: Full-Span

SWG members reviewed the various truss options and noted that the concrete bridge was becoming more attractive because the lack of above deck structure would open views of the stream and reduce visual blockages of traffic and scenery. Several members of the SWG were favorable towards the concrete bridge option since it would be more narrow, less costly, and would allow for clearer visibility throughout the area. ***The SWG expressed strong interest in the concrete bridge option, and did not express support for the faux truss that mimicked the existing bridge truss.***

IV. Comparing Alternatives

The Facilitator requested that the SWG provide their suggestions, recommendations and observations about the resulting list of combined bridge and construction method alternatives that would be carried forward for environmental review:

- Alternative 1: No Build
- Alternative 2a: Steel Truss, 3-span, Conventional construction (with detour bridge)
- Alternative 2b: Steel Truss, 3-span, ABC, Longitudinal Move-in construction
- Alternative 3a: Concrete Bridge, 3-span, ABC, Longitudinal Move-in construction
- Alternative 4a: Steel Truss, single span, ABC, Longitudinal Move-in construction
- Alternative 4b: Steel Truss, single span, ABC, Traverse slide-in place construction

The environmental document will review each of these alternatives and provide the public an opportunity to see the data before a final selection is made.

V. Next Steps

There will be ***four more newsletters published*** at the following milestones: findings from the SWG meetings (target distribution date around June); the announcement of the public distribution of the draft environmental document (DED); publication of the summary of public input received on the DED; and the announcement of the availability of the final environmental document. ***The SWG also suggested including information regarding the safe routes to schools, addressing the sidewalk issue discussed in the meeting, the culvert issues, long-term connectivity use of the bridge, and the next steps for the project (environmental review).*** The Facilitator offered to host a fourth SWG meeting to discuss the second newsletter; however, the SWG decided to leave it as an option for a future date. SWG members felt that enough information was exchanged until more information can be developed for the DED. The SWG was satisfied that the broader public will have input after the DED is prepared and therefore a fourth SWG meeting was not scheduled.

Next meeting: To be determined based on SWG need.

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[i] According to National Research Council's 2012 report titled *Sea Level Rise for the Coast of California, Oregon and Washington: Past, Present and Future.*

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