



# Santa Clara Valley Water District

**File No.:** 17-0316

**Agenda Date:** 5/18/2017

**Item No.:** 6.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Consider Recommendations Relating to the South San Francisco Bay Shoreline Study and Shoreline Recreational and Emergency Access.

### **RECOMMENDATION:**

- A. Receive report relating to the South San Francisco Bay Shoreline Study and Shoreline Opportunities Related to Recreational and Emergency Access; and
- B. Direct County Administration to prepare a letter of support for the District's application to the San Francisco Bay Restoration Authority for a grant of the Measure AA funds for the Shoreline Economic Impact Area 11 Authorized Project.

### **SUMMARY:**

This item has been prepared for the joint Santa Clara Valley Water District (District) meeting with the County of Santa Clara (County) to discuss Santa Clara County recreation and emergency access opportunities along the South San Francisco Bay shoreline area.

At the April 12, 2016 County Board of Supervisors meeting, the County Board approved President Cortese's referral to County Administration to prepare a work plan with the District for the study of the South Bay shoreline as well as waterfront issues and opportunities relating to flood control, emergency access, economic development, parks and recreation, and tourism. President Cortese directed County Administration to provide an initial work plan to the County Board's Housing, Land Use, Environment, and Transportation Committee (HLUET) at its August 2016 meeting.

At the August 18, 2016 HLUET meeting, the County Administration presented a status report and work plan. The Committee requested a refinement to the work plan to further explicate anticipated South Bay shoreline project milestones, and directed County Administration to report back on additional areas of joint study and activity with the District.

At the October 20, 2016 HLUET meeting, County Administration presented a refined work plan for HLUET's consideration. Chairperson Cortese directed the County Administration to provide a report to the Committee on a date uncertain relating to joint opportunities to pursue public and recreational

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access to County and Federal facilities at the South Bay shoreline. Chairperson Cortese indicated that his office would contact the Office of the Mayor of San Jose relating to a joint meeting of the City and County economic development teams to discuss this matter. This report was originally scheduled to be discussed at the January 19, 2017 HLUET meeting, but was deferred by the Committee Chair until the May 2017 joint meeting between the District Board and the County Board of Supervisors for further discussion.

### **Executive Summary of County Staff's Reports**

County Parks and Recreation staff presented a Feasibility Study for a project to construct a public dock to be located in Alviso, at the April 2017 meeting of HLUET. County staff will provide the District with updates related to the County's efforts to increase public recreational access at the South Bay shoreline, including the expansion of the Salt Marsh Safari pilot into an ongoing program.

Based on input received from HLUET at the October 2016 meeting, County Administration is considering issuing a Request for Information (RFI) in the fall to potentially retain an Events Promotion Consultant(s) to consider and develop potential opportunities at existing recreational facilities located at the shoreline, including the Alviso Marina County Park, Don Edwards National Wildlife Refuge, Alviso Levee Trail / Bay Trail, and San Francisco Bay Area Water Trail as well as Alviso proper.

County Administration believes the recommendation would be consistent with the County Board's recent action to identify the increased utilization of the shoreline in the County's Legislative Priorities document:

*"Funding and policies that promote the response to climate change in the South Bay and the increased utilization of the San Francisco Bay Trail, San Francisco Bay Area Water Trail, Alviso Marina County Park and Don Edwards San Francisco Bay National Wildlife Refuge"*

The County Administration will also continue to work with local emergency response agencies to explore the feasibility of having the Alviso Marina County Park or other Santa Clara County South Bay locations be designated for emergency access to the South Bay for disaster relief.

### Next Steps / Timeline

- **May 2017** - County's operation of its the Salt Marsh Safari Program resumes for season
- **September 2017** - County prepares and releases an RFI for shoreline events promotion
- **September 2017** - District submits grant application for San Francisco Bay Restoration Authority Measure AA Funds for the Shoreline Economic Impact Area 11 Authorized Project.
- **November 2017** - County staff reports to HLUET on results of RFI for shoreline events promotion

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**Overview and Update of the South San Francisco Bay Shoreline Study**

The overall goal of the South San Francisco Bay Shoreline Study (Shoreline Study) is to safeguard protect hundreds of homes, schools, and business along Santa Clara County's 18 miles of shoreline from the risk of tidal flooding. The Shoreline Study also has a goal to allow restoration of tidal marsh and related habitat that was lost due to former salt production activities and to provide opportunities for continued recreational and public access along the bay shoreline. Additionally, the Shoreline Study takes into consideration protection from 2.59 feet of high sea level rise over a 50-year period (through Year-2067).

The Shoreline Study is being undertaken by the district in partnership with the United States Army Corps of Engineers (USACE) and the State Coastal Conservancy (SCC). Authorization to conduct the Shoreline Study was granted by the Water Resources Development Act (WRDA) in 1976. SCC and the District are the non-federal sponsors, also referred to as 'local project sponsors.' The feasibility study efforts began in 2005 for all of Santa Clara County which was divided into 11 areas, called Economic Impact Areas (EIA). In September 2010, the District requested USACE re-evaluate the project scope and conduct the study in phases beginning with the area with the highest potential economic impacts. The District's Board endorsed this new scope in March 2011 and the study was thereafter refocused to start with just EIA 11.

**Shoreline EIA 11 Authorized Project**

USACE has authorized a project for EIA 11 that will provide 1-percent tidal flood risk management for the urban area of north San Jose including the community of Alviso and the San Jose-Santa Clara Regional Wastewater Facility and ecosystem restoration of approximately 2,900 acres of former salt ponds with recreational elements. Tidal flood risk management consists of 4 miles of new levee and closure structures at the Union Pacific Railroad and Artesian Slough crossings. In the EIA 11 area, a 1-percent tidal flood event could cause more than \$200 million in damages (2014 price levels) and affect a population of 5,500, approximately 1,100 structures and the Facility.

Recreational elements that are included in EIA 11 will be compatible with the flood risk management levee and ecosystem restoration. American with Disabilities Act compliant trails will be built on top of the new levee along with viewing platforms and benches. The trail will connect the Alviso Marina to the Coyote Creek corridor at the McCarthy Boulevard bridge with connection to the San Francisco Bay Regional Trail network.

**Shoreline EIA 11 Authorized Project Funding**

The Shoreline Study completed the Feasibility Study of EIA 11 on December 18, 2015 when the USACE's Chief of Engineers signed the Chief's Report. The report makes a recommendation to Congress to authorize design and construction of EIA 11's recommended plan. The total feasibility cost was \$22 million and the total estimated cost of preconstruction engineering, design and construction is \$174 million (2015 dollars). The District and SCC total share of this expense is \$103.8 million. The District and SCC do not yet have all the local funding secured and will be applying for San Francisco Bay Restoration Authority's Measure AA funds.

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On June 7, 2016, residents of the nine-county San Francisco Bay Area voted with a 70% majority to pass Measure AA, the San Francisco Bay Restoration Authority's (Authority) San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure. This measure is a parcel tax of \$12 per year that will raise approximately \$25 million annually for twenty years to fund shoreline projects that would protect and restore San Francisco Bay. The tax measure will be implemented beginning on July 1, 2017 and will raise \$500 million over its 20 years (until 2037).

The Measure states that 50-percent of the \$25 million raised each year shall be allocated and divided amongst each of the four Bay Area Regions (North, South, East and West Bay), the south bay will be receiving 12-percent of the overall \$500 million (or \$60 million). The Authority plans to issue its first request for proposals for funds in September 2017 and applications will be due in November 2017. The District will be submitting a grant application in September for the Shoreline EIA 11 Authorized Project and as such recommends the County provide a letter of support for granting these funds.

### **Shoreline Study for EIAs 1-10**

In 2015, in addition to working with the USACE on the next EIA or set of EIAs, the District hired a consultant to begin preparing a Preliminary Feasibility Study for EIAs 1 -10, which is located between San Francisquito Creek in Palo Alto to Guadalupe River in San Jose. The goal of this Study was to identify a preliminary 1-percent tidal flood risk management alignment and its related benefits and costs for the EIAs 1-10 shoreline area (14 miles) to aid in determining the District's next study phase(s) and to identify potential study partners. The preliminary alignment was identified in June 2015 and was used to move forward with conducting the study analysis.

The City of Palo Alto, City of Mountain View, City of Sunnyvale, City of San Jose, NASA Moffett Field, US Fish and Wildlife Service, California State Coastal Conservancy and Mid-Peninsula Open Space Authority were all consulted in the identification of the preliminary alignment. In March 2017, the Preliminary Feasibility Study for EIAs 1-10 was completed. A report was prepared and finalized after receipt and consideration of comments from all consulted agencies noted above and a final meeting with those agencies was conducted in March 2017.

The EIAs 1-10 study effort will next focus on preparing material for a workshop meeting (Charrette) with the USACE which is anticipated to occur in late 2017, pending the USACE receipt of federal funding to conduct the Charrette.

### **Public Access and Recreation at Alviso Marina and the Shoreline**

As set forth in the County's previous reports to HLUET, in addition to ongoing projects related to levee improvements, the Bay Trail extension, and marsh restorations at the shoreline, the County is proceeding with several programs at the shoreline. These County programs include the Salt Marsh Safari program transitioning from its pilot status into an ongoing program in 2017 and the completion of a Feasibility Study for a public dock in Alviso, the results of which were reported to the County's HLUET Committee in April by Parks and Recreation staff.

As previously reported to HLUET, with one-time funds to purchase a larger boat and to provide storage, and ongoing funds for operations and additional staffing, County Parks would be able to

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transition the Salt Marsh Safari program from a pilot-program to full operation. The new boat being purchased by the County is being built, and delivery is expected in October of 2017. For this year, County Parks staff will again work with the Sheriff's Office to use Sheriff's boats to support the program as it resumes for the season in May.

In addition to current County projects and programs, the County Administration recognizes there are opportunities to build recreational/community activities in Alviso to make it a destination, such as, the County's collaboration with the Silicon Valley Bike Coalition and San Jose Bike Party to organize a Bike to the Bay as part of this year's Day on the Bay in October - a community bike ride from Guadalupe Park along the Guadalupe River Trail to Alviso. The County Administration believes these type of activities would be best effectuated by the issuance of a RFI by the Asset and Economic Development team, seeking qualified consultants to provide new events promotion and/or to supplement current County activities, as well as to increase public access to existing recreational facilities located at the shoreline, including the Alviso Marina County Park, Don Edwards National Wildlife Refuge, Alviso Levee Trail / Bay Trail, the San Francisco Bay Area Water Trail and in Alviso proper to make it a more attractive destination. It is expected that the results of that solicitation will be reported to HLUET in November, including estimated costs and formal recommendations.

The County Administration anticipates an additional opportunity for discussion about increasing recreational opportunities at the Alviso Marina County Park at this joint meeting between the County Board of Supervisors and the Santa Clara Valley Water District.

### **Emergency Access Designation of South Bay Shoreline**

At the October 20, 2016 meeting of HLUET, the Committee indicated that the County's focus should be for the County Marina to be designated for emergency access for disaster relief. Supervisor Cortese noted that the marina would likely be utilized by public safety personnel in a disaster and there may be administrative means to make this evident through the County's own disaster plans.

County Office of Emergency Services (OES) confirmed that the County Marina is not currently designated as an emergency access point for disaster relief in any of the County's emergency plans, nor is there any "Marine Access Point" for Santa Clara County designated in any of the State Emergency Plans. OES indicated that while a marine access point would be beneficial to the operational area, staff is unaware of any feasible location along the shoreline at this time that could be used in its current condition, including the County Marina. OES indicated that if emergency supplies were to be transported via marine water ways to Santa Clara County for disaster relief, the most likely port of entry would be in San Mateo County, and supplies would then be transported by land to Santa Clara County. Additionally, OES is unaware of any such emergency access designation in the Water Emergency Transportation Authority (WETA) or Metropolitan Transportation Commission (MTC) emergency plans.

WETA is the regional public transit agency tasked with planning and building an emergency response and disaster recovery water transportation system for the region to respond to an earthquake or other disaster, and to coordinate the Bay Area's publicly owned ferry fleet in response to emergencies affecting the Bay Area transportation system. The MTC develops coordinated emergency response capabilities for transportation agencies throughout the nine-county San Francisco Bay Area.

In March, staff in the Office of the County Executive met with WETA staff to discuss the agency's inclusion of the South Bay region in WETA's Strategic Plans, and to understand the process for including regional ferry terminals or marinas in their Emergency Response Plan. Initial response from WETA indicated that consideration of South Bay locations, after implementation of the Redwood City terminal, even for Emergency access, would likely prioritize other South Bay locations with closer proximity to the Bay proper. WETA reports that previous analysis indicates that it would take as long for a ferry to travel up the Alviso Slough as it would to cross the Bay, effectively doubling transit time as compared to other potential locations in the South Bay. Staff will continue to engage WETA and will contact MTC to explore the feasibility of Santa Clara County - South Bay locations being designated for emergency access for disaster relief.

### **Previous San Jose Deep-Water Port Proposals**

Alviso was incorporated in 1852 in large part for transportation and shipment of cargo and people into the Santa Clara Valley, with regularly scheduled steamship service between Alviso and San Francisco beginning as early as 1849. Over the next several decades, Alviso developed into a commercial shipping point for the entire South Bay region. Unfortunately, around the turn of the century, accelerated siltation of the Alviso slough as a result of hydraulic mining in the Sierra foothills, decreased outflow of the Guadalupe River, and the increasing sizes of commercial vessels marked the end to commercial shipping at Alviso.

As noted in a 1958 report from the Greater San Jose Chamber of Commerce, in the early part of the last century there was considerable interest in the development of a deep-water port at Alviso to accommodate ocean shipping. In 1928, members of the San Jose Real Estate Board formed the San Jose Port Association with the intention of establishing a deep-water port at Alviso, to be called Port San Jose. The Association sought governmental assistance for the project, and a team from the USACE conducted a feasibility study and approved the project. The recommended plan for the development of the port called for a widening of Alviso Slough to 300 feet, and dredging to a depth of 27 feet, from a mile southeast of Dumbarton Point to the mouth of the Guadalupe River.

On August 30, 1935, Congress approved the River and Harbor Act, authorizing \$300,000 for the project on a joint federal-local basis and imposing stipulations on local interests for the development to proceed. The City of San Jose sought to sponsor bonds totaling \$1,250,000 for the project, but there were numerous delays and the bond measure was never placed before the voters. In May 1939, the San Jose City Council determined that there was insufficient interest in the project, and the proposal was dropped.

The Greater San Jose Chamber of Commerce sought to revive the project in 1958, and in 1964, the USACE issued a report indicating that the project would cost significantly more than would be feasible given the estimated annual revenues for the port. The plan was never constructed, and in 1975 with the passage of the Water Resources Development Act of 1974, Congress deauthorized the project.

### **South San Francisco Bay Emergency Access Study**

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In 2009, the County participated in the funding of a local study of emergency water access and economic development opportunities for the South San Francisco Bay. Led by the District and the San Jose Silicon Valley Chamber of Commerce, the South San Francisco Bay Emergency Port Access Study (Emergency Port Access Study) received grant funding from the U.S. Department of Commerce's Economic Development Agency and matching local funds from the County, the District, and the City of San Jose.

The consulting firm AECOM performed the Emergency Port Access Study, a high-level analysis of the feasibility of an emergency access port in Alviso and four potentially complementary development concepts; evaluation of the projects was completed in three phases (preliminary screening, alternatives refinement, and economic analysis). Stakeholder involvement was an important component of the Emergency Port Access Study, achieved through meetings of a Technical Advisory Committee with representatives from agencies and organizations in the South Bay (including the County), and public workshops were held in the community in July 2010, December 2010, and March 2011.

The preliminary screening phase of the Emergency Port Access Study evaluated the physical requirements (channel dimensions, landside facilities, and transportation and access), potential environmental impacts (such as to water quality, wetlands, and wildlife, as well as federal, state, and local regulatory compliance), and economic considerations (market and service area) for each of five concepts:

- **Cargo Port** - to provide infrastructure for receiving and sending unboxed commodity cargo by water.
- **Emergency Port** - to facilitate response and recovery following a catastrophe, such as, a major earthquake, which may result in widespread devastation across the entire Bay Area.
- **Entertainment Waterfront** - containing a mix of retail, entertainment, and potentially hotel, convention, and residential uses.
- **Ferry Terminal** - to provide water-based transportation to popular home, work, and recreation destinations.
- **Recreation Marina** - to provide for boating, storage, and launching facilities.

After initial evaluation of the physical requirements and potential environmental impacts of a **Cargo Port or Ferry Terminal project, both concepts were eliminated from further consideration** - both projects would require extensive dredging and the widening of the channel. The three remaining alternatives (Emergency Port, Entertainment Waterfront, and a Recreational Marina) were identified for a more detailed engineering review of the physical requirements of the projects.

During the alternative refinement phase of the Emergency Port Access Study, it was determined that most water-based projects would require considerable dredging given the shallow depth of Alviso Slough and its distance to the bay (approximately 4.5 miles). Given the potential presence of contaminated sediments and increased disposal expenses, any new dredging project would impose

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considerable costs (estimated to be between \$39 million - \$440 million for initial dredging, and an additional \$44 million - \$285 million for maintenance over 20 years) and significant challenges associated with permitting - challenges which, according to the Emergency Port Access Study, **rendered any concept that required extensive dredging infeasible**. The remaining development concepts that would not require dredging were an Emergency Port served by a hovercraft (Emergency Hovercraft Port), and an Entertainment Waterfront.

The final phase of the Emergency Port Access Study was an analysis of the costs and economic benefits to the South Bay of the proposed Emergency Hovercraft Port and Entertainment Waterfront concepts. The evaluation of the Emergency Hovercraft Port estimated the increased capacity for emergency response in the event of a major disaster relative to the potential capital and operation expenses. For the Entertainment Waterfront concept, the Emergency Port Access Study analyzed both the direct fiscal benefits to the City of San Jose and the economic benefits in direct earnings in Santa Clara County, and compared those against the public costs to prepare the property for development and to make open improvements on the waterfront.

Draft study findings were presented at a March 2011 public workshop in Alviso, and the final Emergency Port Access Study report was released the same month, concluding that both concepts - an Emergency Hovercraft Port and an Entertainment Waterfront development - **were feasible and were estimated to result in net benefits to the South Bay**.

- **Emergency Hovercraft Port** - The Emergency Access Port Study report indicates the primary objective of the **Emergency Hovercraft Port concept** would be to allow for the transport (import and export) of people, goods, and/or emergency supplies following a catastrophic event. The Emergency Hovercraft Port concept would serve primarily as an access point for first response personnel, and could also provide limited “recovery transportation” via a ferry between Alviso and San Francisco. According to the report, the concept would contribute to redundancy of emergency response in the South Bay, complementing the area’s existing emergency network and the Water Emergency Transportation Authority.

The Emergency Port Access Study report estimated the public benefits of an Emergency Hovercraft Port related to emergency response would range between approximately \$10.4 million and \$31.3 million over the next 30 years, and the benefits related to recovery transportation would add an additional \$86,000 to \$2.5 million benefit over 30 years. According to the report, **the total benefits associated with the Emergency Hovercraft Port concept are valued at approximately \$10.5 million to \$33.8 million over 30 years**.

According to the report, the Emergency Hovercraft Port concept would require public investment to fund capital costs, annual operations and maintenance, emergency response and recovery transportation. Depending on the size and carrying capacity of the hovercraft, capital costs for the Emergency Hovercraft Port would range between \$1.2 million and \$7.6 million, annual operations costs range from \$1.4 million to \$7.7 million, and increased costs of emergency response and recovery transportation would be between \$35,000 and \$225,000.

The Emergency Port Access report indicated that the **total costs associated with the**



**Emergency Hovercraft Port concept over 30 years would be between \$2.6 million and \$15.5 million.**

- **Entertainment Waterfront** - As stated in the report, the Entertainment Waterfront concept includes approximately 83,000 square feet of destination commercial development along Alviso waterfront between the east side of the flood control levee between the community of Alviso and Alviso Slough, and would result in improvements to the existing Bay Trail. Constructions of the development would face several potential challenges, including existing restrictions on any construction that would alter or compromise the existing flood control levee, and approval would be required from multiple regulatory agencies (e.g. BCDC, District, USACE, City of San Jose). The report indicated that further geotechnical analysis would be necessary in future stages of implementation.

The report estimates that **total public investment required for the development would be \$4.2 million, and \$33 million in private investment would be necessary**, with the City of San Jose expected to receive approximately \$4.4 million in tax revenues, not including indirect or induced fiscal benefits of such a project.

The Emergency Port Access Study concluded that the net value of the emergency response and recovery transportation benefits provided by the Emergency Hovercraft Port concept would range from approximately \$7.9 million to \$18.3 million over 30 years, and the Entertainment Waterfront concept would, over a 20-year period, generate direct economic impacts of \$530 million in Santa Clara County and would create 622 new jobs.

## Project Initiation and Implementation

The Emergency Port Access Study report identified a proposed project initiation timeline for both concepts of at least five years, given that both projects would require additional planning and permitting, collaboration with regional stakeholders, and the identification of funding sources:



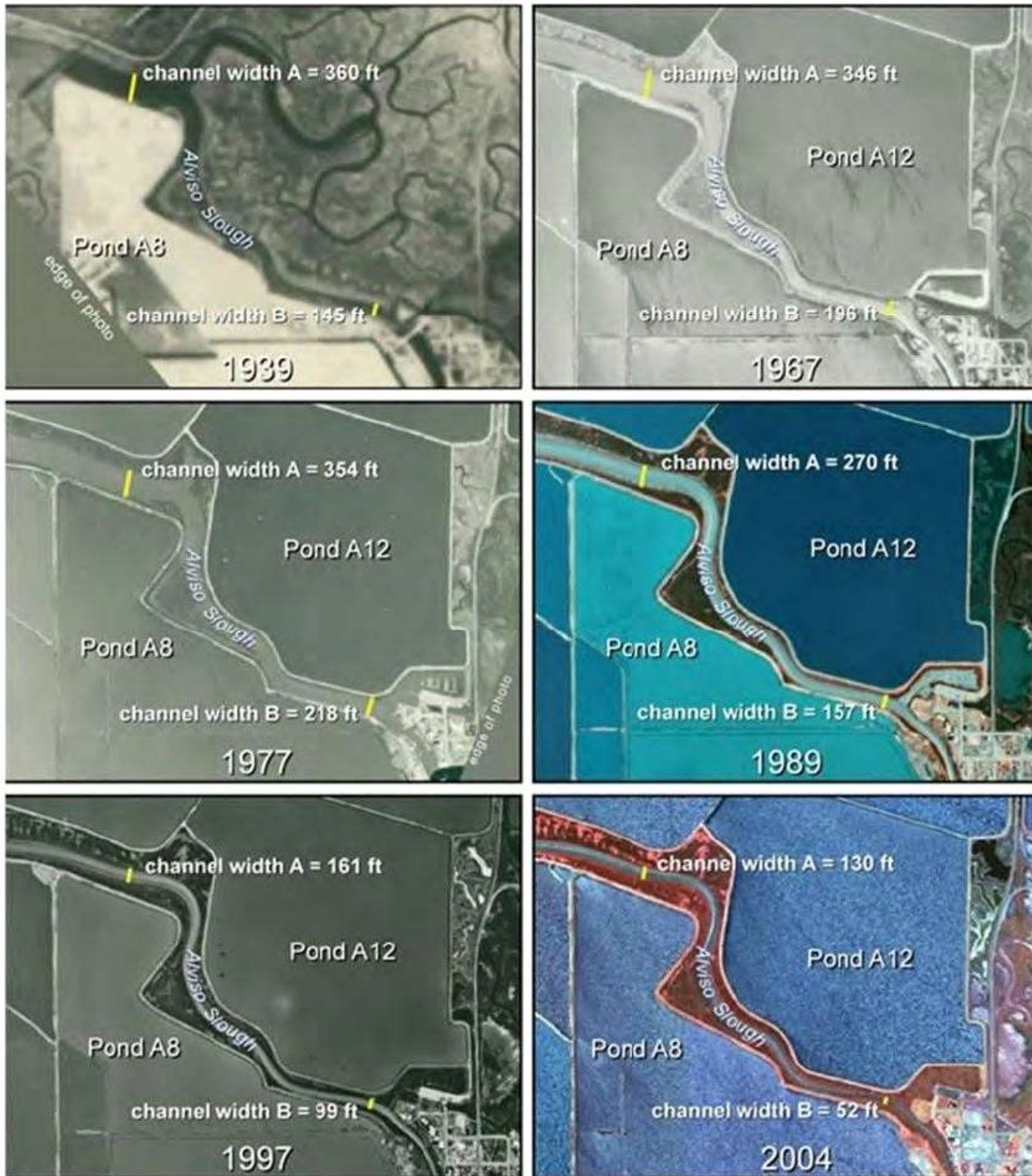
Source: South San Francisco Bay Emergency Port Access Study, AECOM

According to the report, the recommended next steps would be to secure necessary funding to perform more detailed site analysis and land use planning, complete Environmental Impact Statements / Environmental Impact Reports, and to obtain regulatory approval from the BCDC, the U.S. Department of Fish and Wildlife, and the City of San Jose, among others agencies.

### **Historical Uses of Alviso Slough**

While Alviso Slough was historically used for navigation, boating, and public access to the South Bay, sediment accumulation and vegetation encroachment over the last twenty-five years has led to a gradual decline in both channel width and overall depth, thereby limiting these uses.

Alviso Slough, 1939-2004



Source: South San Francisco Bay Emergency Port Access Study, H.T. Harvey & Associates

**FINANCIAL IMPACT:**

There is no financial impact associated with this item.

**CEQA:**

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

**ATTACHMENTS:**

Exhibit 1: PowerPoint

**UNCLASSIFIED MANAGER:**

Ngoc Nguyen, 408-630-2632