



Santa Clara Valley Water District

File No.: 18-1075

Agenda Date: 12/12/2018

Item No.: 4.

BOARD AGENDA MEMORANDUM

SUBJECT:

Updates Associated with Coyote Creek.

RECOMMENDATION:

- A. That the District Board and the City Council receive information regarding updates to the joint emergency action plan with the addition of Canoas, Guadalupe and Ross Creeks;
- B. That the District Board and the City Council receive information on the status of Anderson Dam winter operations;
- C. That the District Board and the City Council receive information on the Water District's Flood Awareness/Winter Preparedness Campaign for 2018-2019; and
- D. That the District Board and the City Council receive information on the current status of the Coyote Creek Feasibility Study.

SUMMARY:

A. Joint Emergency Action Plan

Outcome

By accepting the report on the additions to the Joint Emergency Action Plan (JEAP), both agencies acknowledge:

- The City and the District committed to an agreement on November 3, 2017 to annually test and update the JEAP as needed;
- Changes are identified by designated staff from the City and District;
- Updates are tested in an annual exercise; and
- Updates are approved by the City Manager and District Chief Executive Officer.

The operational and mobilization elements of the JEAP provide guidelines to the appropriate managers and functional departments of both agencies for joint decision-making and mobilization of resources during all four levels of flood threat. The JEAP outlines roles and responsibilities on public communications and emergency notification. Multilingual messages, methods for communicating, and channels of communication are now pre-determined and in accordance with flood condition and operational levels.

This JEAP provides oversight and guidance. It is not intended to provide ultra-detailed directives of

what to do during storms and flood monitoring and response, as the City and District have independent responsibility with limited resources to accomplish their tasks. Led by the City in coordination with the District, the JEAP is reviewed by staff, updated, and tested by an annual exercise, and presented to Executive Management for approval.

Background

With staff of both jurisdictions participating, the JEAP was developed by a Management Team that organized staff within six Work Groups to prepare the components of the JEAP, as well as to plan and implement other actions to mitigate flood concerns. These Work Groups included:

1. Joint Emergency Action Plan (JEAP)
2. Technical
3. Communications
4. Creek Management
5. Short-Term Projects
6. Action Planning

The Management Team reconvened meetings in June 2018 to identify the key waterways that would be added to the JEAP. Team members recognized the need to add Canoas and Ross Creeks and the Guadalupe River. Staff met in their respective groups to develop review materials for the additional waterways.

On November 5, 2018, designated City and District staff met to evaluate the JEAP materials. An outside consultant conducted the Table Top Exercise, and staff actively participated. The key findings identified that the JEAP remains a viable tool, and the additional materials related to Canoas, Ross and Guadalupe are consistent with the Coyote Creek scenario. The opportunity to access real time data and updated hydraulic maps were identified.

Joint Emergency Action Plan (JEAP) Analysis

The JEAP is operational throughout the year, regardless of conditions. When flooding is not a concern, stakeholders focus on preparedness, which largely entails activities that reduce the risk of flooding and preparedness education in the community. During this period, stakeholders perform such activities consistent with their jurisdictional responsibilities. When flooding becomes a concern, the EAP provides guidance based on three proven, operationalized programs: Multi-Agency Coordination (MAC) Group, Flood Condition Levels, and model data.

Multi-Agency Coordination (MAC) Group. City and District staff agree that operating under the structure of a MAC Group will improve coordinated decision-making, operational response, and communications. Concepts and activities outlined in the EAP are associated with the level of storm or flood threat. To maintain the collaborative nature of a MAC, this EAP is considered active 24/7. The principles and actions of a MAC are integrated at all levels. The intensity and degree of activity will

increase or decrease in response to stream and creek conditions.

Flood Condition Levels. Flood condition levels align with four definitions used by the National Weather Service:

1. **Preparedness (Green)** - Stream depth is below 50% of flood stage. Flooding is not expected within the next 72 hours.
2. **Monitoring (Yellow)** - Stream depth is between 50% and 70% of flood stage. Flooding could possibly be reached in 72 hours or more.
3. **Watch (Orange)** - Stream depth is between 70% and 100% of flood stage. Flooding could be reached within 24 to 72 hours.
4. **Warning (Red)** - Stream depth is very close to or at flood stage. This is an urgent situation. Flooding is estimated to occur within 24 hours or is occurring.

Staff determine flood condition levels by using information from the following sources:

- Weather forecasts
- The District's Automated Local Evaluation in Real Time (ALERT) Gauge System, providing data readings at <http://alert.valleywater.org/sgi.php<././././Users/alevgord/AppData/Local/Microsoft/Windows/INetCache/Content>.
- Hydrologic/Hydraulic Modeling
- Observations by field teams

Model data. From the experience in writing the original JEAP in 2017, the District staff developed hydraulic model data for the Canoas and Ross Creeks and the Guadalupe River, while City staff updated their storm drain system model. From these updated models, staff created stage-based flood inundation maps that include both the creek and storm drain flooding information for reference during future flood events. The additional hydraulic system data and maps were added to the JEAP document.

Evaluation and Follow Up

The City of San José Office of Emergency Management will maintain the plan and provide updates as needed. For 2018, the JEAP went through individual agency review, and a joint Tabletop Exercise (TTX) on November 5, 2018. On an annual basis the EAP will be reviewed, exercised, and updated. When updates are identified, the City Manager and General Manager will be briefed and have the authority to approve the updates.

Public Outreach

The methods of how to reach the public were reviewed in a series of public "Winter Storm Resource Fairs" in 2017. The methods on how to communicate with the public and the messages to be disseminated are consistent. Through the City and District public education staff, contact with the public remains paramount and provided during regular meetings with neighborhood associations, public meetings, and activities.

Coordination

The development of this memorandum has been coordinated with the Santa Clara Valley Water District, City Attorney's Office, and relevant City Departments.

B. Anderson Dam Winter Operations

The District operates 10 surface water reservoirs throughout the county. The District reservoirs are operated primarily as water supply facilities that provide incidental flood protection, environmental and recreational benefits. Many reservoirs are operated to flood risk reduction rule curves. The volume of water above the rule curve may be released if it is safe to do so, to create additional storage in the reservoir and to reduce flood potential. The curves maximize water supply benefit and reduce flood risk with a high probability of the water being recovered by the end of the season.

The following is a checklist of activities performed by Raw Water Operations/Field Operations staff before a reservoir flood release is initiated;

- Check weather forecast (estimate rainfall runoff)
- Check stream flow
- Check for National Weather Service Advisories/Watches/Warnings
- Coordinate with Watershed Operations (identify any existing blockages or restrictions downstream)
- Notify residents and agencies on creek contacts list

Many of the District's reservoirs are subject to seismic restrictions set by the State Division of Safety of Dams (DSOD) limiting the volume of water stored in the reservoirs. In October of 2017, following an extremely wet winter, the District's Board directed staff to operate the Anderson Reservoir system following a 40% exceedance rule curve to reduce the probability that Anderson Reservoir storage levels would exceed the seismic restriction limits. By operating to stay below the seismic restriction, this also reduces the chances of Anderson reservoir spilling and any associated downstream impacts. The winter of 2017/2018 produced below normal rainfall throughout the state and locally. As a result, local reservoir storage is only a quarter of the total capacity and storage levels in Anderson Reservoir never reached the rule curve to require releases. Anderson Reservoir will continue to be operated following the 40% exceedance rule curve during the winter of 2018/2019.

C. Santa Clara Valley Water District Flood Awareness and Winter Preparedness Campaign for 2018-2019

This winter, the District will continue to deliver flood-safety messages throughout Santa Clara County. The main public education objectives are the following:

- Convey to the general public that flooding can be a serious threat (even if you don't live in the floodplain)
- Explain what people can do to protect themselves and reduce risk to life and property
- Direct the public to appropriate District resources on valleywater.org/floodready for additional information
- Earn credit towards FEMA's Community Rating System through our Program for Public Information, which helps communities earn discounts on flood insurance premiums for residents

In November, a targeted mailing of the annual floodplain mailer was mailed to nearly 53,000 homes and businesses in or near flood-prone areas. The piece provides information on flood-protection projects and flood-safety resources and features a countywide map indicating 100-year FEMA flood zones. The mailer is written in English, Spanish, Vietnamese and Chinese. This year we are running a full-scale paid advertising campaign that launched in November and will continue through the end of March 2019. The campaign may be further expanded if the winter turns out to be particularly wet.

During the winter months, the District will convey flood preparedness messages through a selected range of communications platforms including radio spots, newspaper ads, online ads, social media and web videos. To reach diverse ethnic audiences, media messages will be delivered through Spanish, Chinese and Vietnamese media outlets. The focus of the District's flood awareness campaign is informing the community of flooding hazards in the county and to providing information on what community members can do to protect their family and property before, during and after a potential flooding event. Flood-safety tips and messages will also be heard by callers to the District when placed on hold.

This fall we participated in 14 community events to distribute flood-preparation materials and answer questions about flood safety. We have chosen events that are in areas most prone to flooding. These include parts of South County in Morgan Hill and Gilroy, Sunnyvale and Mountain View along the shoreline, as well as vulnerable areas in San Jose. District staff has pursued partnership opportunities with local community-based organizations in cities with flood-prone areas to identify opportunities for outreach. District staff has also been working with City Council offices to include flood-safety messages in council district newsletters as appropriate throughout the winter months. With the help of City Council staff, the District has been reaching out to neighborhood associations that represent areas in flood zones and is offering a presentation to communities on existing flood risks and winter preparedness. In November, district staff presented to the District 9 Leadership Group on flood risks specifically related to Ross Creek.

Through our outreach, we are also promoting Santa Clara County's AlertSCC emergency notification system and their ReadySCC app. AlertSCC is a free, easy, and confidential way for anyone who lives or works in Santa Clara County to get emergency warnings sent directly to their cell phone, mobile device, e-mail, or landline. It is one of the most effective ways for local jurisdictions to communicate flood hazards and evacuation orders, but it requires residents to opt into the system. The ReadySCC App allows residents to prepare a family emergency plan with five simple questions, send status updates to contacts, receive advisories and alerts via push notifications, and includes a detailed guide with step-by-step instructions for creating an emergency kit. As an incentive to download ReadySCC, residents who download the app receive a free emergency starter kit. These kits were first introduced to the community last year and include basic supplies such as a hand-operated flashlight, mylar blanket, rain poncho, safety whistle, gloves and glow stick. While these kits are basic, they serve as encouragement for residents to begin preparedness on a larger scale. Residents who do not have a mobile phone are encouraged to fill out emergency contact cards to receive their kit.

The District website serves as a one-stop shop for flood-related information, including how to register

for emergency updates, flood safety tips and information on sandbag sites, stream and reservoir gauges in the county. The website also prominently displays the district's Flood Watch Tool. Social media and online publications through our news website, valleywaternews.org [<https://valleywaternews.org/>](https://valleywaternews.org/), will continue to be utilized to provide registered recipients with timely and immediate flood-hazard messages.

D. Coyote Creek Feasibility Study

Over the past year, the District has continued progress on planning and delivering a flood risk reduction project to the Coyote Creek community. The project is currently in the planning phase. The project will develop solutions to protect Coyote Creek communities from Montague Expressway to Tully Road up to at least the level of the February 2017 flood, which was the highest flow event since Anderson Dam was constructed in 1950. The draft problem definition report has been completed and is under review. This will be followed by alternatives development and analysis in the remainder of FY19. The problem definition report is the first step in the planning phase and describes the findings and problems identified along the creek. Public input meetings are currently being scheduled for early in 2019.

Concurrently, the District is also conducting a US Army Corps of Engineers (USACE) feasibility study, with as-needed technical help from the USACE, paid by the District. This is being done to potentially become eligible for federal and state funding for the flood protection project. A Memorandum of Agreement was developed with the USACE in May 2018 and the feasibility study is currently being scoped.

In 2017, the District planned, designed and built a 900-foot long levee/floodwall section to protect the Rock Springs community from a flood similar to the 2017 event. This interim project was completed in January 2018 and is currently in operation. The District will continue to look for similar early implementation opportunities to effectively reduce the risk of flooding to the community as the planning study is being developed.

FINANCIAL IMPACT:

The recommended action has no financial impact.

CEQA:

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

ATTACHMENTS:

Attachment 1: PowerPoint

Attachment 2: Joint Emergency Action Plan

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UNCLASSIFIED MANAGER:

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