

File: 31811
Various

August 15, 2011

Mr. John Davidson
Department of Planning, Building, and Code Enforcement
City of San Jose
200 East Santa Clara Street, 1st Floor
San José, CA 95113

Subject: City of San Jose General Plan EIR

Dear Mr. Davidson:

The Santa Clara Valley Water District is a special district with jurisdiction throughout Santa Clara County and is the county's primary water resources agency. The Water District acts as the county's groundwater management agency, principal water resources manager, flood protection agency and is the steward for its watersheds, streams and creeks, and underground aquifers.

The Water District appreciates the opportunity to comment on the Draft EIR for the Envision San Jose 2040 General Plan. This letter highlights key findings, makes policy suggestions and provides specific comments related to the expertise of the Water District: water supply, flood protection and water resources stewardship. We would be happy to meet with you to discuss any of these topics further or to help you locate information that would assist your continued development of the General Plan.

Flooding Impacts

Policy IN-3.1, Action EC-5.18 and Action IN-3.16 propose to increase the design standard of the City's storm drain system from a 3-year event to a 10-year event. Water District analysis of this policy indicates that when the City enlarges the storm drain pipes to a 10-year capacity, the impact to the receiving creeks are significant, not only at the point of discharge, but also to downstream channels. Peak flows in a heavy storm event could increase 10 to 100 percent, depending on the creek, which could result in significant impacts to flooding. The Draft EIR does not address this significant effect. The City will need to adopt mitigation measures in Section 3.7.3.1 (Impact HYD-1) of the EIR and/or additional policies in the Envision San Jose 2040 General Plan to offset this impact. At a minimum a policy should be added assuring that increased runoff from the storm drain system does not exceed the capacity of flood protection facilities. Policies should also reflect the need to coordinate hydrologic assumption with the Water District to ensure adequate master planning of flood reduction infrastructure, creeks that can convey water to the bay, and the City's storm drain system.



Similarly, in Section 3.10.1.3 the EIR discusses the need for a Charcot Avenue pump station to accommodate new development, but fails to address the impact of 480 cfs of discharge to Coyote Creek during a 100-year event in the Flooding section.

Strengthen Policies for Avoiding or Minimizing Flood Hazards

Large areas of San Jose were historically subject to natural flooding. Many of these areas have been protected (up to the 1% event) via flood protection projects (primarily levees, floodwalls, channel modifications, and culverts). However, flooding (both tidal and from creeks) may still occur if a natural event exceeds the 1% design level, and can result from localized street flooding due to storm drain capacity issues, which has also been mapped by FEMA. Understanding the residual risks inherent to homes and businesses protected by levees is an important aspect to evaluating and managing flood risk. Although levees are designed to protect to 1% flood standards, levees are subject to overtopping or failure in larger events. San Jose also includes areas that are subject to inundation under sea-level rise scenarios.

To protect areas from flood damages, cities must make land use decisions to ensure runoff from development or paving does not increase flood flows beyond the design carrying capacity of the creeks, and to support continued funding for development of new and maintenance of existing flood protection infrastructure, primarily levees, floodwalls, channel modifications, and culverts. Throughout the Envision San Jose 2040 General Plan and Draft EIR, there are reference to the Water District as the flood management agency for the county. While the Water District does provide for regional flood protection infrastructure and maintenance, the City has the lead role in flood plain management. The City must assure land uses are appropriately sited, flood hazards to development are minimized, and flood hazards to existing properties are not increased.

The Water District suggests adding in the Flooding Hazards of the General Plan greater discussion on tidal flooding and vulnerabilities to sea level rise in Alviso and north San Jose. Specifically the Water District suggests the following references be added and incorporated into the General Plan, and updated as new projections become available:

- BCDC Bay Plan Amendments on sea level rise
- California Ocean Protection Council's Guidelines for sea level rise

Since 2009, AB 162 requires local governments to revise general plans to address flood risks and to collaborate with local flood agencies to understand and plan for reducing flood risk. It mandates flood risk analysis in four General Plan elements: Land Use, Housing, Conservation and Safety.

- a. Land Use Element - Identify areas that are subject to flooding.
- b. Housing Element - The determination of available land suitable for urban development may exclude lands where the risk of flooding would make it impractical for housing.
- c. Conservation Element – Identify rivers, creeks, streams, flood corridors, riparian habitats, and land that may accommodate floodwater for purposes of groundwater recharge and stormwater management.
- d. Safety Element – Establish goals, policies & objectives to minimize risks from flooding. The following are specified in the legislation:

- 1) Avoiding or minimizing the risks of flooding to new development.
- 2) Evaluating whether new development should be located in flood hazard zones.
- 3) Maintaining essential public services during flooding.
- 4) Locating new essential public facilities outside of flood hazard zones.
- 5) Establishing cooperative working relationships among public agencies with responsibility for flood protection.

The Water District suggests adding policies under EC-5:

- a. Strengthen compliance with the City's Floodplain Ordinance to include Department of Water Resources Model Ordinance Provisions and increase the rating the CRS program;
- b. Confirm with the Santa Clara Valley Water District on the latest versions of flood/inundation maps and require new development and major redevelopment to provide mitigation to ensure that the cumulative rate of peak run-off is maintained at pre-development levels;
- c. Confirm with Bay Conservation and Development Commission and California Ocean Protection Council on latest for Sea Level Rise projections, and curtail development or at a minimum enforce strict guidelines in areas subject to sea-level rise or tidal inundation;
- d. Require setbacks from riparian corridors not only to protect the sensitive ecology of riparian corridors, but also to provide adequate space for future bank repair and maintenance of creeks and levees, and if necessary, improve flood protection projects;
- e. Require setbacks next to levees to minimize property damage in the event of catastrophic failure and to allow for emergency access and potential future levee modifications;
- f. Inform property owners near levees of the risks and assistances in the event of levee failure;
- g. Avoid siting critical facilities in potential levee failure areas;
- h. Support the Santa Clara Valley Water District to develop, maintain existing and new flood protection facilities;
- i. Support regional flood protection efforts, such as South Bay Shoreline Protection when project-by-project mitigation may not be feasible.

Update Dam Inundation Areas

The Water District has completed a seismic study of Anderson Dam that shows the material at the base of the dam may liquefy in a 7.25 magnitude earthquake on the nearby Calaveras Fault. The Water District has imposed operating restrictions to prevent the uncontrolled release of water after a major earthquake. Water at the reservoir is being kept at least 25 feet below the spillway and 45 feet below the crest of the dam. This increases the total allowed storage capacity of Water District reservoirs to 124,400 acre feet with operating restrictions in place (113,800 acre feet is reported on page 624 under "Local Runoff"). A seismic retrofit project has been initiated to fix the dam. The Water District is currently evaluating the stability of Almaden, Calero, Guadalupe, and Lenihan dams as well.

The Water District appreciates the Plan referencing the inundation maps for Anderson Dam, Almaden Dam, Calero Dam, Guadalupe Dam and Lenihan Dam (Lexington Reservoir). It is important to be aware that the ABAG maps, while very useful, are not the same as the official dam failure inundation maps produced by the Water District. Specifically the Water District suggests the City add references to the current inundation maps for these dams, and emphasize the importance of incorporating new versions of these maps as they are periodically updated following stability evaluations.

Provide Consistent Hydrology Analysis

Throughout the Hydrology and Water Quality Report (Appendix G) and the Draft EIR the descriptions of water supplies are inconsistent. For example, on page 22 of the Study, it states that water in San Jose can be broken into three categories: groundwater, surface water, and imported water, and that imported water and surface water are treated prior to delivery. Most of the local surface water developed by the Water District and much of the Water District's imported water is supplied to in-stream and off-stream percolation facilities to supplement naturally occurring groundwater (as is mentioned on page 531 of the Draft EIR).

On page 46 of the Study and elsewhere it states that "Below Anderson Reservoir, Coyote Creek flow is diverted for groundwater recharge via the Metcalf Pond and the Ford Road ponds." It is important to note that groundwater recharge resulting from Water District operations such as reservoir releases are not confined to percolation ponds. The Water District manages reservoir releases for recharge within the stream channels as well.

The Study and Draft EIR blur the distinction between the water supplies to the county and the Water District's supplies. The Water District does not control or contract with SFPUC, and the SFPUC cannot be considered a supply of the Water District, although it is an important water supply for the county. The cited source for many of the figures is the Water District's Urban Water Management Plan, but descriptions and labels have been changed incorrectly. Imported water and treated water are not synonymous. Imported water and local surface water can both be treated and distributed to the water retailers; imported water and local surface water can also be percolated to the groundwater sub-basins for later extraction as pumped groundwater.

Update or Incorporate Latest Plans for the Water Supply Availability

The Water District is dedicated to ensuring a reliable supply of healthy, clean drinking water now and in the future. To do this, the quality and quantity of existing water supply sources, including groundwater, must be sustained and protected. Additionally, water conservation and recycled water use are increasingly important components of the county's water supply portfolio. The Water District appreciates the City's focus on water conservation and water recycling in the Envision San Jose 2040 General Plan.

The Water Supply Assessments from San Jose Water Company and San Jose Municipal Water System assume large increases in water demand over the time frame of the Envision San Jose 2040 General Plan. Much of the future supplies would come from groundwater, recycled water and water conservation. San Jose Municipal Water System expects to increase groundwater pumping from less than 1,000 acre feet per year to nearly 16,000 by 2035; and San Jose Water Company expects to double groundwater extraction from approximately 42,000 acre feet per year to over 84,000 acre feet during the same period to accommodate growth.

The Draft EIR notes that according to the Water District's 2010 Urban Water Management Plan (UWMP) water demands in Santa Clara County would exceed supply in normal rainfall after 2030 and in dry years the Water District would not be able to meet demand without severe water restrictions after 2025. The Draft EIR relies on increased water conservation efforts to ensure there will not be significant impacts to water supply; however it should be noted that

2010 Urban Water Management Plan already assumes significant water saving from conservation. Also, the demands included in the District's 2010 UWMP are based on the demands provided by and used by the retailers in their UWMPs. If the retailer demand projections do not accurately reflect demands associated with Envision 2040, then shortages would be greater than indicated in the District's 2010 UWMP.

Section 3.5.3.8 of the Draft EIR, on indirect impacts to the Bay and Delta Due to Procuring Water Supply, acknowledges the lack of a guaranteed entitlement for increasing water supply and the threat to the Water District's imported water supply due to environmental concerns in the Sacramento Delta. Imported water is not only treated as a direct water supply, but it is also an important component of the Water District's groundwater supply.

Both San Jose Water Company and San Jose Municipal Water System assessments made assumptions about groundwater resources. However, these assumptions have been updated in the latest rounds of 2010 UWMPs for supply sources. The Water District believes that proposed policies need to be more explicit as groundwater supply will play a critical role in Envision 2040's expansion areas. Specifically, the Water District suggests the following:

- a. Actively coordinate with water suppliers to prevent overdraft, and to aggressively protect groundwater resources from the threat of contamination, including preventing saltwater intrusion, assess potential for groundwater and surface water contamination, provide preventive measures for new developments where storm runoff are directed into creeks upstream from groundwater recharge facilities and protect groundwater recharge areas, creeks, and creek sides, from urban encroachment;
- b. Support and contribute to long-term water supply planning and during each major review of the General Plan, confirm (not just coordinate) with water providers (including SFPUC, the District, water retailers) to ensure adequate water supply.

Strengthen Groundwater Protection

The Water District completed a Groundwater Vulnerability Study in October 2010 to evaluate the vulnerability of groundwater to potentially contaminating land use activities and aid in the protection of groundwater resources. The study indicates that groundwater in portions of the Santa Clara Subbasin is highly vulnerable due to the density of commercial/industrial sites or high recharge rates. Groundwater in the Coyote Valley is highly vulnerable to contamination due to high recharge rates and permeable soils. The study findings and related web-based geographical information system tool can be used to support the City's proposed Water Quality Policy MS-20.2, which relates to protecting groundwater in highly vulnerable areas. The Land Use Element should reflect appropriate land uses within these vulnerable areas.

As discussed above, groundwater will become an even more important source to meet increased demand from growth forecast in the Envision San Jose 2040 General Plan. Both the quality and quantity of water to enter the groundwater basin must be protected. The text of section 3.7.3.2 in the Draft EIR appears to focus on protecting the Water District's percolation facilities from new development, rather than protecting areas throughout key recharge areas.

While a majority of groundwater replenishment comes from Water District activities, approximately 15 percent of the total County water supply comes from natural recharge. This natural recharge takes place in creeks and areas of the County with appropriate soil characteristics to allow water to infiltrate to the groundwater basin. In San Jose this occurs in portions of the Berryessa, Cambrian/Pioneer, Coyote, and Willow Glen Planning Areas (as stated on page 553). With this in mind, it is important that the City interpret Policies MS-20.2 and MS-20.3 to include all areas where groundwater percolation occurs, and not just in, or adjacent to, Water District percolation facilities.

The Water District also notes that the transportation diagram shows new bridges over the Guadalupe River at Chynoweth Avenue and Thornwood Drive. These new bridges are not desirable as they would significantly impact Water District percolation facilities and the Water District needs to be included in the planning for these bridges. Policy MS-20.3 calls for replacement capacity in the event that existing percolation facilities are modified for infrastructure projects. This policy must be made clear to include the Water District in determining the capacity lost and to be replaced in order to maintain necessary ground water recharge. Determining replacement capacity includes critical parameters relative to soil conditions, location relative to the underground aquifer, and availability of water supply sources.

As the Chynoweth Avenue bridge is not included in the recent Almaden Ranch proposal, the disposition of the bridge is not clear. If the bridge is not needed for circulation impacts associated with this project, the nexus for future bridge construction is not apparent. If the bridge is still under consideration, its alignment should be identified so as to place the current project buildings appropriately and minimize impacts to the Guadalupe River and recharge ponds.

Support Stream Stewardship

The Water District works to protect our watersheds by promoting good ecosystem habitat, stream biology and water quality. A significant factor affecting watershed health is the extent of development within, and adjacent to, riparian corridors. Managing development adjacent to creeks protects the stability of the receiving creeks from storm water, maintains the quality of the water, and minimizes flood hazards.

The *Guidelines and Standards for Land-Use near Streams* were developed cooperatively between the Water District, Santa Clara County, all 15 cities, with citizens, business, and agricultural interests to streamline the permitting process and protect stream and streamside resources. The Water District uses its Water Resources Protection Manual which is based on the Guidelines and Standards as the primary method to protect the county's creeks where a permit is necessary from the Water District. Please note that the Water District's jurisdiction to issue encroachment permits only applies where Water District holds a property interest (either in fee title or an easement); not within 50 feet of a watercourse as stated on page 451.

The City did not adopt the Guidelines and Standards, but determined that existing City guidance and regulation, including the Riparian Corridor Policy, is equivalent. The Riparian Corridor Policy is cited as a factor in reducing a number of potentially significant impacts to a less than significant level, including: natural communities and sensitive wildlife habitat; special status

species; and surface water quality. Given the importance of the Riparian Corridor Policy to protecting the environment, the Water District encourages the City to strengthen the Policy by ensuring that exceptions to riparian buffer requirements are only allowed where a project proponent can definitively show that a lesser buffer is necessary and appropriate.

Setbacks from riparian corridors are necessary to protect the sensitive ecology of riparian corridors, provide an adequate movement corridor for wildlife, provide adequate space to maintain the creeks and levees, and protect surface and ground water quality.

Connection to our rivers and creeks is an important element to the quality of life for residents. The Water District supports creek-side trails where appropriate and the protection of open space that riparian corridors provide. In many cases, open space adjacent to creeks can provide multiple beneficial uses such as recreation and flood protection. However, trails should also be located outside riparian corridors. This could be clarified in trail policies such as PR-7.2 and PR-8.5.

Expand Analysis of Regional Land Use Impacts and Mitigation

The 2003 General Plan Guideline recognized the importance of viewing the local general plan in its regional context, and the state Legislature has mandated consideration of certain regional impacts in the general plan. The Water District is working with the City on several important regional plans that span a 20-50 year horizon. Please include a discussion of the extent to which the general plan is compatible with other regional plans. The Water District suggests adding a policy to ensure that the city reexamines the general plan when important changes are made in these regional plans or agreements. Here are some examples that could affect or be affected by the General Plan:

- Joint Trails Agreements

The City and Water District approved the *Collaborative Action Plan and Agreement Between the City of San Jose and the Santa Clara Valley Water District for the Development and Operation of Joint Trails Projects* in June 2002. This document sets forth a framework for jointly engage in planning, developing, marketing and maintaining trails and other public recreational features related to those trails.

- Recycled Water Treatment

In February 2010, the Water District and the City of San Jose entered into an agreement that allows for the integration of the recycled water programs at the City and the Water District. The integration agreement promotes cooperation between the two agencies related to the management and operation of their respective recycled water facilities and programs over the terms of the agreement.

- South Bay Salt Pond Restoration Project

The largest tidal wetland restoration project on the West Coast, the goals of the project are to restore and enhance a mix of wetland habitats; provide wildlife-oriented public access and recreation; provide for flood management in the South Bay. When complete, the project will restore 15,100 acres of industrial salt ponds to a rich mosaic of tidal wetlands and other habitats adjacent to the City's service areas on the north.

- The South San Francisco Bay Shoreline Study (Shoreline Study)
A Congressionally-authorized study lead by the US Army Corps of Engineers together with local sponsors to identify and recommend for federal funding one or more projects for flood damage reduction, ecosystem restoration and related purposes such as public access. The study will examine tidally induced flooding in North San Jose.
- Santa Clara Valley Water Resources Protection Collaborative Resolution of Consensus
Approved by participating parties including the City of San Jose in Aug. 2004, the agreement was reached to guide cooperative efforts for enhanced water and watershed resources protection.

Incorporate Climate Change Adaptation Strategies

As noted in the discussions regarding flooding, sea level rise, and water supply, climate change is likely to have significant impacts on the City and the region as a whole. Although it is true that the useful life of certain structures and development may be shorter than the period for sea levels to rise and be a threat (page 548), it is usually very difficult and expensive to remove an established use even if it is later within a hazardous zone. Growth without robust adaptation strategies will not support the City's commitment for environmental sustainability. The Water District suggests the City evaluate the vulnerabilities of the City's infrastructures in addition to the Treatment Plant, including but not limited to storm drainage systems, recycled water pipes, pump stations, transportation network and flood protection facilities, and adopt policies for directing an adaptive approach to incorporate best available science and minimizing flood damages, impacts to water supplies, and habitats when reviewing new development. Specifically, the Water District suggests the following, with an emphasis on the City's role in regional solutions for adapting to sea level rise:

- a. Avoid establishing or permitting new development inside future hazard zones if new protective structures would be necessary;
- b. Promote innovate approaches to redesigning coastal structures;
- c. Support statewide and integrated regional water management;
- d. Support expanding water storage and the management of groundwater resources; and
- e. Support for efforts to plan for and adapt to sea level rise, including advocate for regional approach.

Factual Corrections

The following comments are to correct facts and update information contained in the Draft EIR and appendices. There are a number of additional comments that the Water District submitted in previous reviews that have not been incorporated into the Hydrology Report. We urge the City to coordinate review with the Water District and make revisions to ensure a factual report in the General Plan update.

Hydrology and Water Quality Appendix

- On page 17, the District does not review flood protection on all creeks in the County. The Water District provides comprehensive flood management for the County, and the capital improvement program seeks to identify, prioritize, and implement flood protection projects throughout the county.
- On page 22 of the Study there is a statement that “The impact of salt water intrusion to groundwater wells would be most pronounced for imported water sources but may also impact local groundwater wells in northern San José”. The meaning of this sentence is unclear.
- On page 34 and 35, the Guadalupe River begins at the confluence of Guadalupe Creek and Alamos Creek in south San Jose and is known as the Guadalupe River for all its length to Alviso Slough.
- On page 59 of the Study and page 531 of the Draft EIR, there is reference to two sub-basins within the Santa Clara Valley Basin in Santa Clara County, the Santa Clara Sub-basin and the Coyote Sub-basin. The Water District previously referred to these as separate sub-basins, but as defined by DWR Bulletin 118, the groundwater sub-basin that underlies San Jose is properly referred to as the Santa Clara Sub-basin, a part of the Santa Clara Valley Basin. The Water District has changed the nomenclature to conform to the DWR standard. The Coyote Valley area and the Santa Clara Plain area to the north are considered the two parts of the Santa Clara Sub-basin. The Llagas Sub-basin is part of the Gilroy Hollister Valley Basin and is not part of the Santa Clara Valley Basin; in fact, it is in a separate hydrologic region.
- Page 61 of the Study states that “All three water retailers and SCVWD use groundwater from the SCVSB as a source of supply”. The Water District manages the groundwater sub-basin through direct and in-lieu recharge programs and groundwater protection programs. The Water District does not currently extract groundwater as a source of public water supply.
- Much of the groundwater quality information starting with page 67 of the Study is five to ten years out of date. More current information on water quality is available from numerous sources, including later retailer water quality reports, annual groundwater quality reports and water quality fact sheets on the Water District’s website, and from Water District staff. The information on perchlorate in particular is not correct, dating from November 2003 and earlier. The Water District no longer administers the Leaking Underground Storage Tank Oversight Program. MTBE is no longer in use in California; although there remain existing leak sites, it is no longer leaking from underground storage tanks as stated on page 101 and elsewhere.

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Draft EIR

“Dam Failure” on page 531 incorrectly references the failure of dams at two percolation facilities – Coyote Creek and Rinconada.

The discussion in sections 3.7.1.4 and 3.10.1.1 on recycled water should mention the construction of the Advanced Wastewater Treatment Plant.

The Water District is here to assist the City in ensuring that the community is protected from flood hazards and has a reliable and clean source of water. The Water District welcomes the opportunity to work with the City as you continue to develop the General Plan. If you have any questions or need further information, you can reach me at (408) 265-2607, extension 3095 or my colleague, Sarah Young at extension 2468. Please reference File No. 31811 on any future correspondence regarding this project.

Sincerely,

Sue Tippets
for Michael Martin
Environmental Planner
Community Projects Review Unit

cc: S. Tippets, C. Elias, D. Hook, S. Young, B. Judd, B. Ahmadi, R. Narsim, File

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