February 4, 2011

Mr. Brad Vidro, City Manager
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VIA EMAIL

Re: Notice of Preparation of a Draft Environmental Impact Report for City of Solvang Water System Master Plan Update

Dear Mr. Vidro:

Thank you for the opportunity to submit comments regarding the scope of the draft Environmental Impact Report (EIR) to be prepared by the City of Solvang to evaluate significant environmental effects of the Solvang Water System Master Plan Update (Project). This scoping comment letter is submitted by the Environmental Defense Center (EDC) on behalf of California Trout (CalTrout). CalTrout proactively protects and restores wild trout and steelhead and their waters throughout California. EDC protects and enhances the environment through education, advocacy and legal action. EDC and CalTrout have worked together for over 2 decades to recover Santa Ynez River steelhead populations heavily depleted by ongoing water supply projects including the Cachuma Project. The proposed Project wells in the Santa Ynez River pose additional substantial impacts to steelhead[1] in the Santa Ynez River.

The EIR must comply with the California Environmental Quality Act (CEQA) by disclosing the Project's significant impacts and identifying mitigation measures and feasible alternatives which would avoid or substantially lessen significant impacts. CEQA's primary purposes are to identify the environmental impacts of proposed development, to inform the public and decision makers about the impacts, and to provide opportunities for avoiding and lessening environmental damage whenever possible. A legally adequate EIR includes (1) an adequate project description, including project objectives; (2) a well-documented and up-to-date environmental baseline; (3) complete and accurate impact analyses; (4) effective, enforceable mitigation measures; (5) a thorough assessment of consistency with existing plans and policies; and (6)

[1]*Oncorhynchus mykiss* (*O. mykiss*). The terms "steelhead" and "*O. mykiss*" are used interchangeably throughout this letter.

consideration of a range of alternatives which avoid or substantially lessen significant environmental impacts. All information and analyses in the EIR must be supported by substantial evidence.

Our specific questions and recommendations for the Project's EIR follow.

I. The EIR's Project Description Must Be Stable, Accurate, and Sufficiently Detailed to Enable the EIR to Analyze the Project's Impacts, and Must Include Sufficiently Broad Objectives.

Project Description Must Be Stable, Accurate, and Sufficiently Detailed

The DEIR must include a sufficient description of the proposed project. CEQA requires the project description to include enough detail to facilitate assessment of the environmental impacts caused by the Project.[2]

Agreements, Permits and Approvals

The City's Initial Study/Environmental Checklist (IS/EC) fails to identify any of the discretionary permits/approvals that it would need for the Project, except for those that would be issued by the City itself.[3] Instead, it simply lists the names of local, state and federal agencies. The EIR must specify the discretionary actions that would be required by each agency for the Project to proceed.

For example, the EIR should state and discuss State Water Resources Control Board (SWB) responsibility and legal parameters for approving the City's proposal to install additional River wells and increase pumping of Santa Ynez River water. This discussion should include that the SWB has "an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible."[4] This is a duty of "continuing supervision," and the SWB may, at any time, reconsider permit decisions whether or not those decisions were made after due consideration of their effect on the public trust.[5] In addition, Article X, Section 2 of the California Constitution requires that water resources of the State "be put to beneficial use to the fullest extent of which they are capable" and prevents the waste, unreasonable use, and unreasonable method of use of water.[6] The SWB is required to take all appropriate actions to prevent violations of these standards.[7] These legal requirements reveal the error of the IS/EC assertion that "A license is essentially a permanent water right."[8] The EIR must correct this error in the public record by accurately stating California water law standards.

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[2] CEQA Guidelines §15124.
[3] IS/EC at page 2.
[4] *National Audubon Society v. State Water Resources Control Board*, 33 Cal. 3d 419, 446 (1983).
[5] *Id.* at 448.
[6] Cal. Const. Art. X, § 2. See also, Water Code § 100.
[7] Water Code § 275.
[8] IS/EC at page 7.

The EIR should also consider another matter directly related to the Santa Ynez River that is currently pending before the SWB – the U.S. Bureau of Reclamation's Water Rights Permits (Applications 1131 and 1132) Cachuma Project Phase 2.[9] In this proceeding, the SWB is considering modifications to these permits to protect public trust resources and to restore *O. mykiss* to "good condition." As discussed throughout this letter, construction and operation of the proposed wells directly impacts implementation of the Cachuma Project and its environmental effects.

The IS/EC also fails to list the need for approval from NOAA Fisheries to address impacts to *O. mykiss*,[10] or from the California Department of Fish and Game (DFG)[11] for a Streambed Alteration Agreement for the proposed River wells.

The City also fails to mention the need to, at a minimum, coordinate with the Bureau of Reclamation (BOR), the Cachuma Operation and Maintenance Bureau (COMB), and the Cachuma Conservation and Release Board (CCRB) regarding this Project's interaction with the Cachuma Project. As previously stated and discussed in more detail below, implementation of the proposed River wells is expected to have significant potential impacts on water flow and on *O. mykiss*. Each of these agencies has direct responsibilities under the Cachuma Project.

Purpose and Need

The IS/EC indicates that the "installation of additional River wells is intended to demonstrate beneficial water use at the permitted diversion rate."[12] The EIR should clarify whether the City currently has a permitted diversion rate of 5 cfs (or 3,600 AFY). The City's General Plan identifies the City's Appropriative Water Rights as up to 3,600 AFY but notes, "the ultimate amount that will be licensed to the city is uncertain."[13] "The city's entitlement to this water basin could be reduced to approximately 2,700 to 2,800 acre-feet annually."[14] These statements are consistent with discussion in the IS/EC which suggest that City has yet to obtain a final decision from the SWB regarding this diversion.[15] If the City does not currently have a permitted diversion rate of 5 cfs than the Project objective should not be drafted to imply that it does.

The EIR also should clarify (a) whether a Project objective is to meet a diversion rate of 5 cfs or to meet projected growth demands, (b) whether growth demands or putting all the water to beneficial use is driving the Project, and (c) whether projected growth demands and the diversion rate of 5 cfs coincidentally match.

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[9] The City is a party to these proceedings.
[10] IS/EC at page 2.
[11] *Id*.
[12] IS/EC at page 5.
[13] *Id.* at 8.
[14] *Id.*
[15] IS/EC at pages 6 - 7.

The EIR should also explain how the City will demonstrate it can put all 5 cfs to beneficial use, including whether it must team up with another agency, i.e., Santa Ynez River Water Conservation District Improvement District Number 1 (SYRWCDID#1), to demonstrate a need for the 5 cfs allocated by permit No. 15878. This information will help establish which EIR alternatives are capable of fulfilling most of the Project's basic objectives.

In addition, the EIR should clarify whether the City intends to demonstrate beneficial use before or after the wells are constructed and operated.

By prioritizing the River wells over all other City supplies, the City seems to be utilizing the full 5 cfs to prevent reduction of water rights by the SWB, when in fact other sources exist. The City's approach of demonstrating a need for 5 cfs of River water seems to encourage inefficient, non-beneficial use of the River water, contrary to State water law requirements.

The EIR's project description should explain why, if the two existing River wells in production combined can produce 709 acre-feet per year (AFY)[16], production from those wells only ranged from 50 - 207 AFY since 2005. This baseline information indicates that six additional River wells are not necessary to achieve most of the Project's basic objectives, and that other alternatives would fulfill basic objectives.

Total City water production has ranged from 1,454 to 1,677 during the last 5 years.[17] Given this, the EIR should explain the need to increase the River wells' capacity to 3,600 AFY.

City water production has decreased steadily from 1986 to present due in part to increasing water conservation and reduced landscape irrigation.[18] Given that water demand trend is decreasing over the last 25 years, the EIR should explain why there is a need to increase River well production to 3,600 AFY.

The City's 1986 General Plan notes that at that time that "buildout of the general plan could ultimately result in a maximum peak daily demand of approximately 4,870,000 gallons, which is about 341,000 gallons greater than current supply capabilities."[19] The General Plan states that at the time (1988) no water was being imported from outside the County.[20] Eighty-six percent of the City's water supply was derived from Solvang's Uplands groundwater basin.[21] However, since 1988, Solvang has purchased and receives State Water Project (SWP) water. Given this information, the General Plan does not support the purported need for the large-scale Project currently proposed by the City.

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[16] IS/EC at page 5.
[17] IS/EC at page 8.
[18] IS/EC at page 7.
[19] Solvang Conservation and Open Space Element. 1988. Page 5.
[20] *Id.*
[21] *Id.*

The EIR should discuss why the City is seeking double the amount of water estimated to be needed - 10.82 cfs versus the estimated 5.8 cfs future peak daily demand[22] - and should justify the purported need for the desired production rate. Given the difference between the proposed peak capacity and estimated future peak daily demand, the need for the Project is being overstated and smaller alternatives would fulfill most of the Project's basic objectives as discussed below.

Project Objectives Must Not Unreasonably Restrict the EIR's Range of Alternatives

The EIR's project objectives will help define the range of alternatives. Under CEQA, an EIR's project objectives must set forth the Project's underlying purpose.[23] The EIR's project objectives cannot be so narrow that they restrict the range of alternatives in violation of CEQA.[24] CEQA requires that an EIR include a range of alternatives that avoid or substantially lessen significant impacts while fulfilling most of the Project's basic objectives.[25] Narrowing the objectives to eliminate feasible alternatives which may avoid or substantially lessen Project impacts may violate CEQA. Therefore the EIR must include objectives that are broad enough to foster consideration of an adequate range of less damaging alternatives.

For instance, if the objectives were to specify a specific amount of water sought from River wells or number of wells desired, these objectives should not be used to eliminate alternatives. Alternatives which may produce less water or use fewer wells than the Project can nonetheless meet most of the Project's basic objectives while avoiding or substantially lessening some of the Project's significant impacts.

Full production from the proposed wells in addition to the City's existing supplies can generate almost twice the projected peak daily demand. If the City is proposing to generate about twice the water needed for General Plan buildout, then the City does not actually need all that water. This fact indicates that smaller, less damaging alternatives will be able to fulfill the Project's underlying purpose while feasibly avoiding or lessening significant impacts as discussed below in the section of this letter addressing the EIR's alternatives. If the City defines the Project objectives too narrowly e.g., by stating an objective is to generate a total peak capacity of 10.82 cfs, this objective could be used by the City to eliminate feasible alternatives from consideration even though such alternatives may substantially lessen significant impacts while fulfilling most of the Project's basic objectives.

The IS/EC states that the Project includes prioritizing of River wells over existing water supplies including Uplands wells, SWP and purchases from SYRWCDID#1. This

[22] IS/EC at pages 12 and 13.
[23] CEQA Guidelines Section 15124(b).
[24] *City of Santee v. County of San Diego* (4th Dist. 1989) 214 Cal. App. 3d 1438, 1455. See also *Kings County Farm Bureau v. City of Hanford* (5th Dist. 1990) 221 Cal. App. 3d 692, 735-737.
[25] CEQA Guidelines Section 15126.6(a).

preference may be couched by the City as a project objective but must not limit consideration of alternatives – such as continued reliance on Uplands wells, SWP allotment and purchases from SYRWCDID#1 - which would feasibly fulfill most basic objectives and lessen significant Project impacts.

The EIR's objectives must include objectives to protect and restore existing important natural resources in the River, such as *O. mykiss*, and to maintain or enhance flows in the River for aquatic resources such as *O. mykiss*. In addition, the following objectives are appropriate for this Project:

- Protect the natural environment and existing habitats.
- Restore previously damaged habitats.
- Contribute to recovery of southern California steelhead.
- Provide water in a manner which minimizes climate change impacts.
- Coordinate with other agencies involved with managing flows and underflows in the River.

II. The EIR's Environmental Baseline Must Accurately and Sufficiently Set Forth the Existing Physical Conditions of the Areas and Resources Affected by the Proposed Project.

The EIR must describe the environmental setting with enough detail to ensure an understanding of the significant environmental impacts of the Project and alternatives.[26] As stated in the CEQA Guidelines, "[t]he environmental setting will normally constitute the baseline physical condition by which a lead agency determines whether an impact is significant."[27] An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published.[28] The environmental setting constitutes the baseline physical conditions by which the City will determine whether an impact is significant.[29]

When the environmental baseline is not properly understood, environmental impacts cannot be properly assessed. As a result, there is no basis to determine whether avoidance is feasible or what other mitigation measures are necessary to reduce significant impacts to the extent possible before a project can be approved, as required pursuant to CEQA.[30]

An inadequate baseline will provide the basis for the court to invalidate an EIR. For example, in *Save Our Peninsula Committee v. Monterey County Board of*

[26] CEQA Guidelines Section 15125(a).
[27] *Id.*
[28] *Id*.
[29] *Id.*
[30] CEQA Guidelines Sections 15002(a)(3) and 15021(a)(2). (See also Pub. Res. Code §21081(a)(3) and *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal.App.4th 105, 134.)

Supervisors, the court found that the EIR was inadequate in its baseline discussion for the following reasons: by failing to investigate and present evidence to support the assumption that the pre-project use of water on the property was for irrigation; by introducing a new methodology for baseline determination at the end of the environmental review process; and by inviting the Board to select a baseline at the end of the review process.[31] The court also found that the Board's ultimate decision setting the baseline was not supported by substantial evidence.[32]

The EIR's depiction of the environmental baseline must be supported by professional surveys and other substantial evidence to ensure its accuracy as a starting point for impact assessment.

Cachuma Project

This EIR's environmental baseline includes the current implementation of the Cachuma Project (including as regulated by the NOAA Fisheries September 2000 Biological Opinion), its effects on surface flow, and on the watershed environment. This information must be described in the EIR. The EIR should fully detail the current status of the Cachuma Project, including that BOR and NOAA Fisheries are re-initiating consultation under the Endangered Species Act, that BOR is currently seeking approval of its water rights permits with the SWB, and any other pending or final regulatory actions that effect the physical environment.

Biological Resource Conditions

The Santa Ynez River is of critical importance to many rare species, including *O. mykiss*, which depend on water in the River for survival. According to the DFG, the largest run of *O. mykiss* in Southern California was believed to have occurred on the Santa Ynez River.[33] As such, the River remains essential to recovery of *O. mykiss* and is proposed to be designated by NOAA Fisheries a Core 1 habitat for *O. mykiss* recovery.[34]

Utilize Existing Information

O. mykiss

[31] *Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App. 4th 99, 119-128.
[32] See also *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729 (EIR invalidated due to failure to disclose nearby wetland and wildlife preserve); *Galante Vineyards v. Monterey Peninsula Water Management District* (1997) 60 Cal.App.4th 1109 (EIR deficient for failure to identify wineries in area that would be impacted by the proposed project).
[33] Shapavalov, L. 1944. Preliminary report on the fisheries of the Santa Maria River System, Santa Barbara, San Luis Obispo, and Ventura counties, California. Bureau of Fish Conservation, Calif. Dept. Fish and Game, Admin. Rept. No. 44-14, Sacramento, CA.
[34] Southern California Steelhead Recovery Plan. NOAA. 2009. Draft. Page 63.

The EIR should use, as a starting point, information from existing research and biological surveys. For instance, research undertaken and data collected by other entities and information from NOAA Fisheries' recovery planning process, DFG and other agencies should be used along with documented observations of species present in and around the Santa Ynez River. Existing research and documented observations should be obtained from experts in the Project area's biological resources, including: Matt Stoecker, Stoecker Ecological Consulting and Ed Henke Historical Research for presence of steelhead in Santa Ynez River Watershed.

Other Biological Resources

The EIR should also rely on existing information from the following sources:

Special-status plant and animal species: US Fish and Wildlife Service; Critical Habitat Designations; California Department of Fish and Game Natural Diversity Data Base, California Native Plant Society.
Special-status plant species: Santa Barbara Botanic Gardens Herbarium; UCSB Herbarium; local botanists, including David Magney Environmental Consulting.
Special-status bird species: Audubon Society; Western Foundation of Vertebrate Zoology; local ornithologists such as Mark Holmgren.
Wildlife: Paul Collins, Santa Barbara Museum of Natural History.

This information should then be supplemented and updated based on site-specific research conducted by EIR preparers.

Timing of Biological Surveys

Aquatic species, such as *O. mykiss* in the Santa Ynez River and tributaries, and amphibians in wetlands and streams in the area, are also only found seasonally and surveys should be timed accordingly.

Quality of Surveys

Surveys must meet minimum professional standards to establish the biological baseline, based on substantial evidence, as required pursuant to CEQA. Improper surveys often lead to omission of important biological resources from EIRs. Specialists should be retained to survey for special-status wildlife species potentially present in the Santa Ynez River (e.g. red-legged frogs, legless lizards, owls, bats, etc.). In particular, sensitive areas such as riparian and wetland habitats should be carefully surveyed by professional herpetologist(s), ornithologist(s), wildlife biologist(s), fishery biologist(s), and botanists familiar with the affected areas.

Special-status Species

The EIR must separately consider all special-status species that could be potentially affected by the Project, most notably in the River, Alamo Pintado Creek, other

tributaries and associated riparian habitats. Special-status species include State and Federal Threatened and Endangered Species, California Fully Protected Species, California Species of Concern, California Native Plant Society (CNPS) lists, and the Audubon "Blue List."[35] Locally important species are also special-status species that should be assessed in the EIR. EIR preparers should also consult the California Natural Diversity Data Base (CNDDB),[36] CalFlora[37] and E Bird[38] to identify special-status species that may be affected by the Project.

Special-status species expected to be potentially present include but are not limited to:

- Southern California Steelhead
- Red-legged Frog
- Western Pond Turtle
- Two-Striped Garter Snake
- Least Bell's Vireo
- Southwestern Willow Flycatcher
- Townsend's Big-eared Bat
- Cooper's Hawk
- Loggerhead Shrike
- Sharp-shinned Hawk
- Tricolored Blackbird
- Yellow-breasted Chat
- Yellow Warbler
- California Legless Lizard
- California Horned Lizard
- Western Spadefoot Toad
- Arroyo Chub

This list was derived from the Santa Ynez Valley Community Plan Final EIR's[39] list of special-status species which was winnowed down by habitat type. The species listed above nest in or exhibit other associations with riparian habitats in and around the Project area.

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[35] CEQA Guideline Section 15380 defines Endangered, Rare or Threatened Species broadly to include species which are not formally listed under the state or federal Endangered Species Acts but are otherwise rare.

[36] The goal of the CNDDB is to provide the most current information available on the state's most imperiled elements of natural diversity and to provide tools to analyze these data. http://www.dfg.ca.gov/biogeodata/cnddb/ (Last viewed January 20, 2011.)

[37] Calflora is a website you can use to learn about plants that grow wild in California (both native plants and weeds) and a nonprofit organization responsible for the website. http://www.calflora.org/ (Last viewed January 20, 2011.)

[38] E Bird is a real-time, online checklist program that has revolutionized the way that the birding community reports and accesses information about birds. http://ebird.org/content/ebird/about (Last viewed January 20, 2011.)

[39] Santa Ynez Valley Community Plan Final EIR. 2009. Table 4.5-3.

Hydrological Conditions

One of our major concerns is that the Project wells will remove water from the Santa Ynez River aquifer, thus causing surface water in the River to infiltrate more rapidly, leading to increased and more rapid dewatering of the River and impacts on *O. mykiss*. The EIR should utilize scientific research to set forth the River's existing geological and hydrological conditions relating to percolation of flows from the River into underground aquifers in order to identify and disclose the proposed wells' impacts on flows throughout the lower River.

III. The EIR Must Assess, Classify and Disclose Environmental Impacts and Must Identify Mitigation Measures which Avoid or Mitigate Significant Impacts to the Maximum Extent Feasible.

Consideration and Discussion of Environmental Impacts

The EIR must identify, analyze, and mitigate each and every significant environmental impact of the Project. Specifically, CEQA requires that an EIR "shall include a detailed statement setting forth…*all* significant effects on the environment of the proposed Project."[40] The EIR must evaluate and classify impacts as to their severity.[41] As stated above, impacts are normally measured against the existing environmental setting. In this case, the EIR must measure the impacts against the existing environmental setting for the purposes of CEQA.

The EIR must also analyze and mitigate indirect impacts[42] and cumulative impacts.[43]

Consideration and Discussion of Measures Proposed to Mitigate Significant Effects

The EIR must describe feasible mitigation measures which will avoid or substantially lessen each significant environmental effect to the maximum extent feasible.[44] A lead agency cannot approve a project if there are feasible alternatives or mitigation measures that would avoid or substantially lessen significant impacts.[45] The lead agency's decision with regard to the feasibility of mitigation measures must be based on substantial evidence in the record.[46] Decisions regarding whether or not alternatives and mitigation measures substantially lessen or avoid significant impacts must also be based on substantial evidence in the record.

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[40] Pub. Res. Code Section 21100(b)(1), emphasis added.
[41] CEQA Guidelines Sections 15126 and 15126.2.
[42] CEQA Guideline Section 15126.
[43] CEQA Guidelines Section 15130.
[44] CEQA Guidelines Section 15126.4(a)(1); *Save Our Peninsula Committee*, supra, 87 Cal.App.4th at 139
[45] Pub. Res. Code Sections 21002 and 21081(a)(3); CEQA Guidelines Sections 15002(a)(3) and 15021(a)(2); *Mountain Lion Foundation*, supra, 16 Cal.App.4th at 134.
[46] *Citizens for Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167 ("*Goleta I*").

Moreover, mitigation may not be deferred. As a matter of law, an agency cannot defer consideration or adoption of mitigation measures to a later date.[47] Deferral may be allowed in limited instances, provided there is a reasonable expectation of effectiveness and compliance based on a requirement that the measure meet specific performance standards that are identified in the EIR.[48] The impacts of mitigation measures must also be discussed in the EIR.[49]

Biological Resources

The primary area of concern with the proposed Project is its potential to cause significant biological impacts to *O. mykiss* migration, spawning and rearing and the species' designated Critical Habitat in the Santa Ynez River. The IS/EC acknowledges impacts to steelhead are of concern.[50] However the IS/EC fails to identify steelhead as a special-status species or its federally-endangered status.[51] The EIR must carefully evaluate and model how water withdrawals at different locations, pumping rates and seasons affect all *O. mykiss* life stages. This should include discussion of whether installation and operation of the wells would impact BOR's efforts to avoid jeopardy to *O. mykiss* through operation of the Cachuma Project. Similarly, the EIR should also consider whether installation and operation of the wells would impact BOR's ability to keep *O. mykiss* in "good condition" and protected as a public trust resource, as required by State law. For example, will removing water from the aquifer at the proposed diversion location cause surface water to infiltrate more rapidly, and thus imperil *O. mykiss*?

The EIR should identify feasible ways to reduce potential impacts, such as alternatives discussed below, and mitigation measures that would limit the timing, locations and rates of pumping to protect *O. mykiss*. Importantly, mitigation measures must take into consideration ongoing cumulative hydrological effects from projects described below so that mitigation measures for the impacts of Solvang's wells are not rendered ineffective by other entities' activities. Thus, to the extent feasible the EIR must identify measures which can avoid or mitigate Project impacts on *O. mykiss* regardless of other entities' pumping. The City should coordinate with the BOR, SYRWCDID#1, the Alisal Golf Course and other pumpers to ensure the City's mitigation measures can be effective at reducing significant Project impacts to the maximum extent feasible.

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[47] CEQA Guidelines Section 15126.4(a)(1)(B); *Kings County Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296.
[48] *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal. App.4th 777.
[49] CEQA Guidelines Section 15126.4(a)(1).
[50] IS/EC at page 14.
[51] IS/EC discussion of biological resources and impacts. Pages 54 – 56. Noting that the Solvang General Plan only identifies two rare species in the City.

Direct Loss of Habitats & Species

Riparian and wetland habitats such as those in the Santa Ynez River are biologically diverse and productive because they have water in an arid landscape. Santa Barbara County notes that many of the County's animals and plants are geographically almost limited to the Santa Ynez River.[52] The IS/EC notes that the River aquifer can be quickly depleted affecting surface flows.[53] The EIR should evaluate, map and quantify the loss of aquatic, riparian, wetland and other riverbed habitats caused by the proposed River wells' removal of water from the River aquifer, and should describe the habitat degradation that would result from the Project. The EIR should describe the impacts plant, animal and insect species that would be caused by the Project – including focused analyses for each special-status species such as *O. mykiss*, western pond turtle, red-legged frog, and two-striped garter snake.

Alamo Pintado Perennial Reach

The IS/EC notes that wells would be located by the confluence of Alamo Pintado Creek to take advantage of that creek's perennial i.e. year-round flow.[54] Perennial creeks are important habitats for many aquatic and riparian species including steelhead, red-legged frogs, western pond turtles, 2-striped garter snakes and other special-status species occurring in the Santa Ynez River Watershed. Two-striped garter snakes have been documented in Alamo Pintado Creek.[55] Perennial creeks are important watering areas for all types of wildlife. Placement of wells near Alamo Pintado Creek poses the unique threat of eliminating perennial flows and species in Alamo Pintado Creek. The placement of wells near Alamo Pintado Creek threatens to eliminate an important wildlife watering area. The EIR must evaluate these impacts.

Direct and Indirect Wildlife Impacts

The EIR should provide detailed analysis of direct and indirect impacts to wildlife and habitats, including the following:

- Impacts of noise from running the pumps.
- Impacts of climate change from burning fossil fuel to install and operate the Project and deliver water.
- Impacts from human presence installing, maintaining and operating the wells.
- Introduction of non-native plants via equipment and personnel.
- Water quality changes from reduced flows.
- Impacts on predators from reduced prey caused by reduced flows.
- Impacts from discharge of drilling muds into the River.
- Reduced water supply for wildlife.

[52] Santa Barbara County Conservation Element. Page 153.
[53] IS/EC at 15.
[54] IS/EC at page 15.
[55] Santa Barbara County. Santa Ynez Community Plan Final EIR. Page 4.5-23.

Discharges during Well Production, Testing and Development

Well installation includes production and testing which discharges water into the River.[56] The EIR should analyze and disclose impacts of discharging 10,000 gallons of water from each well during production, plus 300,000 gallons per well during pump testing. Impacts may include changes in water temperature, turbidity and chemical composition, and displacement or mortality of *O. mykiss* through inducing migration or movement.

Wetlands, Waters of the United States and Riparian Habitats

The EIR must evaluate impacts to wetlands that could result from extracting water from the River. The IS/EC states that federally protected wetlands do not occur in the Project area and would not be affected by the Project.[57] However, the River consists of federally protected wetlands and Waters of the United States which are subject to Clean Water Act jurisdiction.[58] These wetlands and waters are expected to be affected by the Project wells' cones of depression – the area around each well where groundwater tables are lowered by the well's effect. Removing the source of water from wetlands and Waters of the US is a form of "hydrological interruption"[59] which damages wetlands and aquatic habitats. Impacts caused by hydrological interruption must be evaluated, disclosed in the EIR and avoided or mitigated.

The EIR must also disclose how the Project may adversely affect riparian vegetation. Reduced flows caused by increased pumping will deprive riparian vegetation of flows and this may cause willows, cottonwoods and other species or trees and plants to die. If the Project will reduce water in the aquifer and in the River, at least periodically, then this will adversely affect vegetation along and near the River.

The EIR must evaluate the increased fire hazard caused by the Project, potentially reducing water levels along the River and drying riparian and other vegetation along the open spaces fronting the Santa Ynez River.

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[56] IS/EC at page 19.
[57] IS/EC at page 55.
[58] Penfield and Smith. Santa Ynez River Bank Protection Evaluation. January 20, 2011. Noting that: "In addition to review by the City of Lompoc, state and federal agencies also have jurisdiction over work conducted in and adjacent to the Santa Ynez River. As a result, a U.S. Army Corps of Engineers (ACOE) Section 404 Permit, a California Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification, and a California Department of Fish and Game (CDFG) Streambed Alteration Agreement will need to be obtained. Additionally, consultation with the U.S. Fish & Wildlife Service and the National Marine Fisheries Service will also be required, as a part of the Army Corps of Engineers permit review process." http://www1.cityoflompoc.com/councilagenda/2011/110201/110201n02a1.pdf Last viewed February 2, 2011.
[59] CEQA Guidelines Appendix G.

Air Quality

Greenhouse Gas Emissions

The City must identify, analyze, and avoid or mitigate significant greenhouse gas (GHG) effects.[60] The California Air Pollution Controls Officers Association (CAPCOA) has issued a white paper on CEQA and Climate Change that provides guidance on inventorying GHG emissions.[61]

The GHG inventory must include assessment of the full life-cycle of Project GHG emissions, including GHG emissions caused by well drilling, production, testing and pumping of water from the River up to the users including the use of combustible engine pumps and electrical pumps.[62] The Project's new need to pump all water uphill from the River to City users represents a significant new source of GHG emissions that must be evaluated in the EIR. New development fueled by (1) new water production and (2) SWP entitlement sales will also generate GHG emissions that must be evaluated in the EIR.

GHG emissions can also result from vegetation removal and decomposition.[63] The Project impacts may reduce water available for riparian and wetland vegetation in the River, leading to loss and decomposition of that vegetation, and resulting GHG emissions. To the extent increased pumping decreases biomass, biological production and carbon sequestration and/or causes death and decay or River vegetation (and associated release of methane), the EIR must disclose these indirect GHG emission impacts.

The EIR must assess the significance of the impact on climate change. Recent science supports a determination that *any* net increase in emissions will have a significant effect on global climate change and therefore that a zero emission threshold should be used to evaluate impacts. Current evidence demonstrates the target atmospheric level of CO2 should be 350 parts per million (ppm) to achieve climate stabilization and avoid disastrous global consequences.[64] Given current atmosphere levels of 385 ppm, we are already on a trajectory that is not sustainable, and we must decrease GHG emissions

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[60] CEQA Guidelines Sections 15064.4 and 15064. See also, Appendix G.
[61] CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.* Jan.
[62] Current City water supplies are delivered by gravity flow but River well water must be pumped uphill to users.
[63] Science Daily. July 21, 2008. http://www.sciencedaily.com/releases/2008/07/080720150209.htm Last viewed February 2, 2011.
[64] Matthews H.D., and K. Caldeira (2008), *Stabilizing climate requires near-zero emissions*, Geophys. Res. Lett., *35*, L04705, doi:10.1029/2007GL032388; James Hansen, et al., *Target Atmospheric CO2: Where Should Humanity Aim?* The Open Atmospheric Science Journal, 2008, 2, 217-231; Statements of Dr. Chris Field, Carnegie Institution for Science, Decisive Action Needed as Warming Predictions Worsen, Says Carnegie Scientist, available at http://www.ciw.edu/news/decisive_action_needed_warming_predictions_worsen_says_carnegie_scientist

more rapidly and to a greater extent than previously thought. Thus, *any* additional contribution of CO2 would be a step further from State and regional target levels.

The potential consequences of global warming further underscore the need for a zero threshold standard. The IPCC, Union of Concerned Scientists, and the California Climate Change Center have published several studies that identify how climate change will affect the environment.[65] These impacts include an increase in water temperatures, rise in sea level, coastal erosion, reduction of the Sierra snowpack, increase in severity and frequency of storms, increased droughts, famine, changes in ecosystems, increase in heat waves, increases in pests and diseases, flooding, retreating glaciers, ozone formation, and the potential for wildfires.[66]

The City of Solvang IS/EC references an Interim GHG Emission Threshold released by the Santa Barbara County Planning and Development Department of 10,000 metric tonnes of carbon per year; based on this threshold, the IS/EC concluded no significant impacts would result.[67] In actuality, the County has not adopted any GHG threshold of significance, and any "interim" guidance carries no weight. Solvang must therefore rely on substantial evidence, not a *de facto* 10,000 metric tonne GHG emission threshold, for its CEQA analysis. Given the need to reduce GHG emissions a zero emission threshold is warranted and supported by substantial evidence.

The use of a zero emission threshold is discussed in CAPCOA's white paper.[68] A zero emission threshold was used recently in the California State Lands Commission's Final EIR for the Venoco Ellwood Marine Terminal and Draft EIR for the Venoco Ellwood Full Field Project.[69] We strongly encourage the City to utilize a zero emission

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[65] Union of Concerned Scientists. 2006. California Global Warming Impacts and Solutions, available at http://www.ucsusa.org/clean_california/ca-global-warming-impacts.html. California Climate Change

[66] Karl, T.R., *supra;* Levin, K., *supra*, citing Emanuel, K., *Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years* (Nature, vol. 436, August 4, 2005), P.J. Webster, et al., *Changes in Tropical Cyclone Number, Duration, and Intensity in a Warming Environment* (Science, vol. 309, September 16, 2005), NASA Earth Observatory, *Record Low for June Arctic Sea Ice* (June 2005 at earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16978), A.J. Cook et al., *Retreating Glacier Fronts on the Antarctic Peninsula Over the Past Half-Century* (Science, vol. 308, April 22, 2005), R.B. Alley et al., *Ice-Sheet and Sea-Level Changes* (Science, vol. 310, October 21, 2005), E.D. Domack, et al., *Stability of the Larsen B Ice Shelf on the Antarctic Peninsula During the Holocene Epoch* (Nature, vol. 436, August 4, 2005), F.S. Chapin III, et al., *Role of Land Surface Changes in Arctic Summer Warming* (Science, vol. 310, October 28, 2005), M. Hopkin, *Amazon Hit by Worst Drought for 40 Years: Warming Atlantic Linked to Both US Hurricanes and Rainforest Drought* (Nature, October 11, 2005), I.T. Stewart, et al., *Changes Toward Earlier Streamflow Timing Across Western North America* (Journal of Climate, vol. 18, April 2005).

[67] IS/EC at page 60.

[68] CAPCOA. 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. Jan.

[69] Venoco Ellwood Marine Terminal Lease Renewal Project Final Environmental Impact Report, California State Clearinghouse (SCH) No. 2004071075, CSLC EIR No. 743, April 30, 2009; Draft Environmental Impact Report for the Venoco Ellwood Oil Development and Pipeline (Full Field) Project, State Clearinghouse No. 2006061146, CSLC EIR No. 738, June 2008.

threshold in its evaluation of direct and indirect greenhouse gas emissions. The CAPCOA white paper discusses other approaches as well.

Finally, if the greenhouse gas emission impact is found to be significant, the EIR must identify alternatives and/or mitigation measures that will reduce the impact below significance. Courts have found EIRs inadequate when they improperly defer formulation of mitigation measures to address the global warming impacts.[70] The California Attorney General has also provided guidance on the subject:

> *Can a lead agency rely on policies and measures that simply "encourage" GHG efficiency and emissions reductions?*
> No. Mitigation measures must be "fully enforceable."[71] Adequate mitigation does not, for example, merely "encourage" or "support" carpools and transit options, green building practices, and development in urban centers. While a menu of hortatory GHG policies is positive, it does not count as adequate mitigation because there is no certainty that the policies will be implemented.[72]

There are many concrete, enforceable mitigation measures appropriate for inclusion in an EIR. Examples are described in a variety of sources, including the CAPCOA's white paper,[73] Office of Planning and Research's (OPR) Technical Advisory,[74] and a mitigation list on the Attorney General's website.[75]

Particulate Matter

The City must analyze the effect of drying up the Santa Ynez River on particulate matter in the Santa Ynez River. When the River bed dries, winds pick up silt, organics and other particulate matter which can cause respiratory problems. Santa Barbara County does not meet California state standards for particulate matter (PM10).[76] Any increase in PM10 should be considered a significant impact as it would increase the County's non-compliance with state standards for health and air quality.

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[70] *Sierra Club v. City of Tulare,* Tulare County Superior Court, #08-228122 (March 16, 2009) (mitigation measure requiring development of a plan to identify and reduce greenhouse gas emissions was inadequate "because it impermissibly defers the formulation of mitigation measure and does not include *any* specific performance criteria," emphasis in original, citing *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670).
[71] Pub. Res. Code, Section 21081.6, subd. (b); CEQA Guidelines, Section 15091, subd. (d); see also *Federation of Hillside and Canyon Assocs.* (2000) 83 Cal.App.4th 1252, 1261 (general plan EIR defective where there was no substantial evidence that mitigation measures would "actually be implemented").
[72] California Attorney General's Office. 2009. Climate Change, the California Environmental Quality Act, and General Plan Updates: Straightforward Answers to Some Frequently Asked Questions. Page 5.
[73] CAPCOA white paper at pp. 79-87.
[74] Office of Planning and Research. 2008. CEQA AND CLIMATE CHANGE: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review. Jun.
[75] See http://ag.ca.gov/globalwarming/ceqa/GHGmitigation.php (Last viewed on January 25, 2011)
[76] IS/EC at page 53.

Ozone

The City's proposal to increase pumping to provide River water will generate smog precursors such as NOx, leading to generation of ozone. Santa Barbara County does not currently meet state standards for ozone.[77] Any increase of this problem caused by increasing pumping to supply water from River wells should be considered significant for exacerbating County non-compliance with state ozone standards. To the extent pumping would be fueled by electricity rather than directly by fossil fuel combustion engine pumps in Solvang, the EIR should evaluate where the electricity is generated and whether the increased load to support the Project would contribute to ozone impacts where the electricity is generated i.e. near the power plant(s) providing electricity to Solvang.

Water Supply

The EIR must evaluate impacts on the South Coast's (Goleta's, Santa Barbara's, Montecito's and Carpinteria's) water supplies. Solvang proposes to draw water from new and existing River wells which are expected to reduce flows in the River. The effect of reducing flows in the River may necessitate increased releases from the BOR's Bradbury Dam to meet the target flows established by NOAA Fisheries' Biological Opinion (and to keep *O. mykiss* in "good condition" and to protect public trust resources). What are the potential impacts of the Project on South Coast water supplies, and what are the direct and indirect environmental effects if that water supply is disrupted?[78]

Groundwater Supplies

The EIR states the Project is intended to remove water from the Santa Ynez River Riparian Sub-basin Aquifer described as "an alluvial basin that extends from Bradbury Dam to Alisal Road."[79] The groundwater in the basin "is in direct hydraulic communication with the River's surface flow;"[80] when the River is flowing, all withdrawals from the aquifer come directly off the top of the aquifer, i.e. from surface flow in the River until exhausted. The aquifer "is quickly depleted by pumping if surface flows are limited due to drought conditions."[81] As a result, pumping from River wells can quickly dry up the River's surface flow and subterranean flow. This impact must be thoroughly assessed in the EIR.

Related to this hydrological impact, the CEQA Initial Study checklist includes the following impact:

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[77] *Id.*
[78] *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal. 4th 412.
[79] IS/EC at page 15.
[80] *Id.*
[81] *Id.*

> "Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted."[82]

The IS/EC finds this impact would be less than significant.[83] The IS/EC analysis focuses on "[C]urrent water resources" and "existing water sources"[84] but does not assess the impacts of the proposed River wells. The EIR must assess the impacts of the proposed new wells – not the existing water sources. If increased pumping by Solvang's new wells would lower the local groundwater table such that it would not support efforts to protect and recover *O. mykiss* in line with federal and State requirements, this would indicate a significant hydrological impact to the groundwater basin. The EIR should therefore include discussion of whether installation and operation of the wells would impact BOR's efforts to avoid jeopardy to *O. mykiss* through operation of the Cachuma Project. Similarly, the EIR should also consider whether installation and operation of the wells would impact BOR's ability to keep *O. mykiss* in "good condition" and protected as a public trust resource, as required by State law.

Similarly, the Project may "substantially alter the existing drainage pattern"[85] by altering the hydrology of the River. The IS/EC surprisingly referred to this impact as "less than significant,"[86] but the EIR should carefully evaluate this impact as it relates to the effect of water pumping on River flows and infiltration patterns.

Flooding

The EIR must analyze the potential flooding threat to the wells, and to City workers who may be working on the wells during storms. Given climate change, storm severity is expected to increase.[87] Therefore, the EIR should consider the flooding impacts in light of climate change.

Water Quality

The EIR should analyze whether the Project will reduce flows in the River by increasing pumping from the River. The IS/EC indicates that this is a concern.[88] When flows are diminished in a River, water temperatures increase. Riparian canopy vegetation decreases, exposing the water to more direct sunlight. Algae blooms often result when riparian vegetation is thinned or removed. When algae decompose the process deprives

[82] CEQA Guidelines Appendix G.
[83] IS/EC at page 43.
[84] IS/EC at page 62.
[85] CEQA Guidelines Appendix G.
[86] IS/EC at page 44.
[87] DW.World.DE. August 25, 2009. http://www.dw-world.de/dw/article/0,,4598235,00.html. Last viewed February 2, 2011.
[88] IS/EC at page 14 noting that pumping from river above Alisal Road may impact steelhead.

the water of dissolved oxygen (DO). Warm water temperatures, algae blooms and low DO are all known to be conditions which adversely affect *O. mykiss*. The EIR must therefore evaluate the Project's impacts on water quality including temperatures, algae and DO.

Recreation

The EIR must assess how the Project may affect recreation along the River by reducing flows. The River is a navigable River and is used by the public for a variety of water-related recreational activities including bird-watching, swimming and hiking. For example, how would increased pumping effect recreation by reducing River flows?

Land Use Planning

The EIR must analyze consistency between the Project and applicable general plans, specific plans and regional plans.[89]

Solvang General Plan

The EIR should carefully assess Project consistency with the 1988 General Plan. For example, Policy 2b of the 1988 General Plan states that "The city shall use reclaimed water for irrigation of public landscaped areas to the greatest feasible extent."[90] Policy 2d states "The city shall encourage the extension of the state water project for the purpose of insuring and maintaining an adequate water supply for the city." Discussion in the General Plan makes clear that these policies were adopted for the purpose of avoiding or mitigating environmental impacts.[91] The General Plan also includes Objective 4 for preserving important habitats: "Preserve areas of important biological habitat **and** protect sensitive, rare, and endangered species of flora and fauna." The EIR must evaluate the Project's consistency with the 1988 Solvang General Plan and identify inconsistencies with City policies as Land Use impacts.

Steelhead Recovery Plan

NOAA Fisheries' draft Steelhead Recovery Plan sets forth goals and actions to recover *O. mykiss*. As noted above the Plan designated the Santa Ynez River as a Core 1 (i.e., most important) habitat for recovering *O. mykiss*. The plan identifies high, low and medium threat sources potentially impacting *O. mykiss* in the Santa Ynez River, including the "High Threats" of "Groundwater Extraction" and "Dams and Surface Diversions."[92]

[89] CEQA Guideline Section 15125(d).
[90] Solvang General Plan. 1988. Page 39.
[91] *Id.*
[92] Southern California Steelhead Recovery Plan. Draft. 2009. Page 104.

The Recovery Plan also identifies specific actions necessary to recover *O. mykiss* in the Santa Ynez River including: "Develop and implement water management plans," "Develop and implement groundwater management plans," and "Conduct hydrological analysis (groundwater)."[93] The EIR should evaluate the Project's consistency with the draft Steelhead Recovery Plan and its identified Recovery Actions.

DFG Steelhead Restoration and Management Plan for California

The EIR should evaluate the Project's consistency with the DFG Steelhead Restoration and Management Plan. The Plan notes that "water development appears to be the primary cause of localized extinctions and decline in numbers within southern steelhead populations."[94] The Plan includes recommendations for how to protect *O. mykiss* in light of impacts from water supply projects on the Santa Ynez River.

Growth-Inducement

The Project poses a significant increase in pumping from the Santa Ynez River to support purported future urban growth. CEQA requires that EIRs assess growth-inducement as an environmental impact, including ways in which the project could foster population growth, construction of new housing, removing obstacles to development, and providing new public services which can foster additional growth and cause additional environmental impacts that must be analyzed in the EIR.[95] The EIR must analyze the effects of removing obstacles to growth by increasing the supply of water in rural Santa Ynez.

The EIR must also evaluate the impacts of selling SWP entitlements as described in the IS/EC.[96] It has been reported that Bixby-Cojo Ranch is seeking to purchase water from the Carpinteria Valley Water District, which may fuel urban development.[97] Bixby-Cojo could seek to purchase Solvang's "excess" SWP, if marketed, resulting in growth-inducement. To the extent that the impacts of selling Solvang's SWP entitlements can result in urban development by removing an obstacle to growth, the EIR cannot be found legally adequate and complete if it defers that analysis.

Cumulative Impacts on River Flows and Steelhead

The EIR should evaluate and identify ways to avoid and mitigate the Project's contribution to cumulative effects on *O. mykiss* and flows in the River caused by pumping from the following wells:

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[93] *Id.*
[94] California Department of Fish and Game. Steelhead Restoration and Management Plan for California. 1996. Page 56.
[95] CEQA Guidelines Section 15126.2(d)
[96] IS/EC at page 21.
[97] Santa Barbara Independent. January 27, 2011. http://www.independent.com/news/2011/jan/27/trouble-paradise/. Last viewed on January 31, 2011.

- Alisal Golf Course: Three Wells
- City of Solvang: Two River Wells
- SYRWCDID#1 existing well field upstream of Alisal Bridge: 6 cfs production

And from the following projects:

- Cachuma Project / Bradbury Dam
  As mentioned above, the SWB is currently considering BOR's Water Rights Permits (Applications 1131 and 1132) for the Cachuma Project to protect public trust resources and to restore *O. mykiss* to "good condition." In addition, NOAA Fisheries and BOR are re-initiating consultation under the Endangered Species Act to ensure that the Cachuma Project does not jeopardize *O. mykiss*.
- Gibralter Reservoir
- Jameson Reservoir
- San Lucas Ranch Water Diversions
- Alisal Golf Course Reservoir Project[98]

IV. The EIR Must Evaluate Feasible Alternatives which Avoid or Substantially Lessen Significant Impacts.

The EIR must analyze the impacts of an adequate range of feasible alternatives that avoid or lessen significant impacts, such as those caused by removing water from the Santa Ynez River environment, and which meet most of the Project's basic objectives.[99] The following alternatives are feasible, would meet the overall objective of the Project, and have the potential to avoid or substantially lessen Project impacts:

Water Conservation

Increasing water conservation would reduce future City water demand and essentially provide a new "source" of water for the City's future needs without causing significant impacts by taking water from the Santa Ynez River's federally-endangered steelhead. This alternative would be consistent with the General Plan's discussion of alternative water supplies identified by the Santa Barbara County Water Agency.[100] It would also be consistent with General Plan Policy 2.a, which states: "The City shall require all new developments to incorporate water conservation measures into project design to the greatest extent practical."[101] As noted in the General Plan, this alternative can be combined with other sources to meet water supply objectives.

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[98] Santa Barbara County Planning and Development Department. http://www.sbcountyplanning.org/PDF/boards/za/01-24-2011/10CUP-00000-00018/Staff%20Report.pdf Last viewed February 4, 2011.
[99] CEQA Guidelines Section 15126.6(a).
[100] General Plan at page 6.
[101] General Plan at page 39.

The IS/EC notes "increased water conservation by all users,"[102] but IS/EC Table 2-2 demonstrates that per capita water consumption has stayed roughly level since 1995.[103] This is during a time when new technologies allowed for greater water conservation. Per capita water use in SYRWCD (231 gallons per person per day (gpcd)) is higher than anywhere else in the Santa Ynez Valley, the South Coast and the County (e.g., Santa Barbara City, 85 gpcd; Goleta Water District, 82 gpcd; Carpinteria Valley Water District, 87 gpcd; and Montecito, 201 gpcd).[104] Substantial additional water conservation in SYRWCDID#1, including within Solvang, is possible and has been demonstrated feasible.[105] Conservation should therefore be a key alternative analyzed in the EIR and can be considered in tandem with all other alternatives to reduce reliance on Santa Ynez River water and associated environmental impacts.

Alternative Locations

In order to lessen impacts on flows and steelhead in the River, the EIR should analyze alternative locations for wells including (a) new wells in aquifers outside of the River and (b) wells in other areas of the River.

Regarding alternative locations for new wells in the River, the IS/EC notes that Solvang is proposing wells outside of the authorized zone of diversion and is seeking a change to its water rights permit to allow construction of wells to a distance of 1.5 miles downstream from Alisal Road.[106] Part of the justification is to reduce well interference and impacts to steelhead above Alisal Road.[107] The EIR should consider alternatives that place all of the proposed new wells downstream from the Alisal Bridge because this would impact an area of the River near Solvang that is less preferable to steelhead (i.e. those reaches that tend to dry out more), and would thus potentially lessen impacts on steelhead. By avoiding pumping above Alisal Bridge, this alternative may reduce impacts to surface water flow and *O. mykiss*, and should therefore be evaluated in the EIR.

The EIR analysis should pair this alternative with the Water Conservation Alternative to ensure most of the Project's basic objectives can be feasibly accomplished while lessening potentially significant impacts to *O. mykiss*.

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[102] IS/EC at page 7.
[103] IS/EC at pages 8 – 9. See also IS/EC at page 8 stating "The per capita water use in the City has been relatively stable at about 250 gallons per person per day for many years."
[104] Pacific Institute. Dana Haasz and Peter Gleick. Comments on the Draft EIR for the Cachuma Water Rights. Hearing Report to the Environmental Defense Center. October 6, 2003. The conclusions in this report were verified and updated by Pacific Institute in 2007.
[105] *Id.* at Page 4 noting that an active toilet retrofit program could save 132 AFY, landscaping irrigation could save 247-394 AFY, CII toilets could save 61 AFY and washing machines could save 27 AFY in Santa Ynez.
[106] IS/EC at page 14.
[107] *Id.*

Reduced Pumping Alternatives

The EIR should include alternatives that consider pumping less water than the proposed Project. These alternatives would reduce impacts on the River flows and steelhead. Such alternatives are feasible. The IS/EC states that the total City peak water supply would reach 10.82 cfs under the Project while the Water System Master Plan identifies future peak demand as only 5.8 cfs. The City's existing water supplies plus the proposed Project's water supplies are "more than adequate to meet future demands."[108] Therefore alternatives which generate less water than the Project but which are capable of meeting the City's future peak demand estimate plus a reasonable safety margin fulfill the Project's underlying purpose.

In addition, the EIR should describe how Solvang's proposal as part of this Project to sell up to 300 AFY, or possibly more, of SWP entitlements[109] increases the feasibility of alternatives which may not generate as much water as the Project. The fact that the Project will render all or some of the City's SWP entitlement to be "excess" water further demonstrates that Reduced Pumping Alternatives can feasibly fulfill most of the Project's basic underlying objectives.

The SWB issuance of a permit for Lompoc to divert up to 3,600 AFY of water from the Santa Ynez River occurred in 1969, 28 years prior to the listing of *O. mykiss* as federally-endangered. Given the subsequent listing of *O. mykiss*, and pending SWB action involving the Cachuma Project, it is reasonably foreseeable that the SWB may limit diversions from the River. The EIR should plan for this possible outcome by considering a range of Reduced Pumping Alternatives.

The EIR should study alternatives that would increase current production from River wells by 1 to 3 cfs. Such alternatives would fulfill most of the Project's basic objectives while substantially lessening the Project's expected significant impacts on *O. mykiss* in the River. As an example, one alternative to study in this range would be, consistent with the SWB's 2001 action, a maximum diversion rate of 1.85 cfs for the City's two existing River wells.[110]

No Project Alternative

The No Project Alternative may be a feasible way to fulfill most Project objectives while completely avoiding impacts to steelhead. CEQA requires lead agencies to analyze the No Project Alternative for this reason, and to compare the impacts of approving a project with the impacts of not approving a project.[111] In this particular case a thorough analysis of the No Project Alternative will be very useful because information in the IS/EC indicates that most of the Project's basic objectives can be fulfilled without

[108] IS/EC at page 12.
[109] IS/EC at page 21.
[110] IS/EC at page 6.
[111] CEQA Guidelines Section 15126.6(e).

pursuing the Project's proposed new River wells. Under this alternative, the City would continue to rely on the Uplands well(s), SWP entitlements, the 2 River wells and purchases from SYRWCDID #1 to avoid new impacts to steelhead in River. The EIR should fully evaluate the extent to which water supplies under the No Project Alternative are adequate for the City, in order to tease out how much additional water, if any, the City must produce to fulfill most of the Project's basic objectives.

Wastewater Recycling

The General Plan identifies "the reclamation and re-use of wastewater" as "a consideration in the search for ways to meet future demands for water resources. Despite the political, economic, and legal obstacles to wastewater recycling, it is an important and technologically feasible method to ensure that water resources are used wisely."[112] Therefore, in keeping with the General Plan, the EIR should evaluate a Wastewater Recycling Alternative as an alternative to the Project's heavy reliance on River water.

IV. Conclusion

In closing, the City must establish an accurate description of baseline conditions and an accurate and stable project description, and must evaluate potential environmental impacts based on substantial evidence. The EIR should always seek to first identify methods to feasibly avoid significant impacts, and should include a sufficient range of feasible, less-damaging alternatives to give City and ultimately state decision-makers options for preserving the public's important environmental resources.

Thank you for the opportunity to provide you with this information. Please feel free to contact Brian Trautwein at (805) 963-1622 or Karen Kraus at (805) 658-2688 if you have any questions.

Sincerely,

Brian Trautwein
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Karen M. Kraus
Staff Attorney

[112] General Plan at page 12.