

**TO: HONORABLE CITY COUNCIL**

**FROM: CITY MANAGER**

**DEPARTMENT: UTILITIES  
AND PUBLIC WORKS**

**DATE: JANUARY 25, 2010**

**CMR: 111:10**

**REPORT TYPE: CONSENT**

**SUBJECT: Utilities Advisory Commission Recommendation to Adopt a Resolution  
Establishing a Salinity Reduction Policy for Recycled Water**

**RECOMMENDATION**

Staff and the Utilities Advisory Commission recommend that the Council adopt a resolution approving the proposed Recycled Water Salinity Reduction Policy (Salinity Policy).

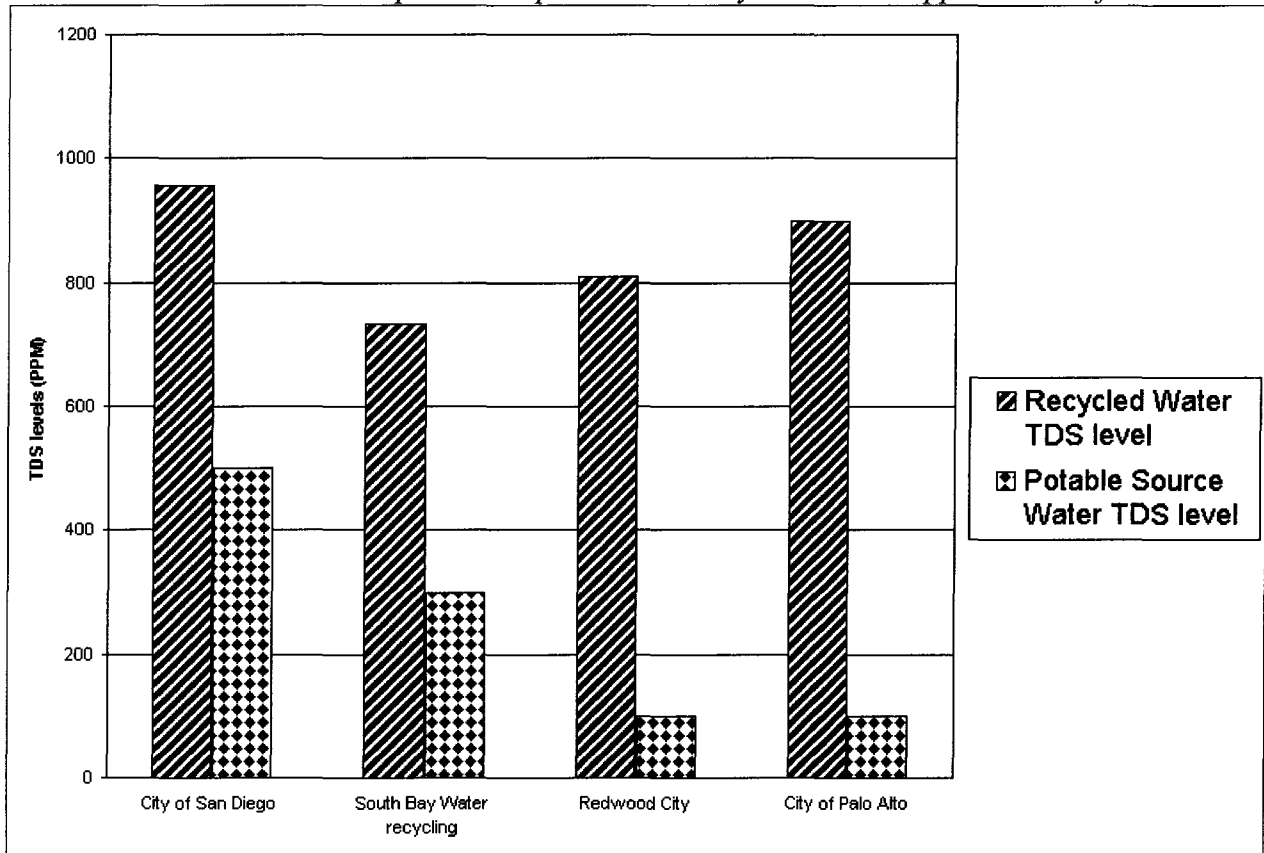
**BACKGROUND**

Recycling treated wastewater is increasing in the arid West as a response to the fact that populations are increasing and fresh water supplies are not. Palo Alto and other communities are using treated wastewater for landscape irrigation and that use is expected to grow dramatically in the future. Salts accumulate in water when it is used by people and industrial processes. To maximize the use of recycled water for irrigation on the widest variety of green plants, the recycled water's salt content (salinity) needs to be minimized. The issue of salinity of recycled water was raised by Canopy and the Stanford Real Estate office when they reviewed the recycled water project's draft environmental document. The purpose of this policy is to ensure that the City is taking all practical steps to reduce salinity in recycled water.

**DISCUSSION**

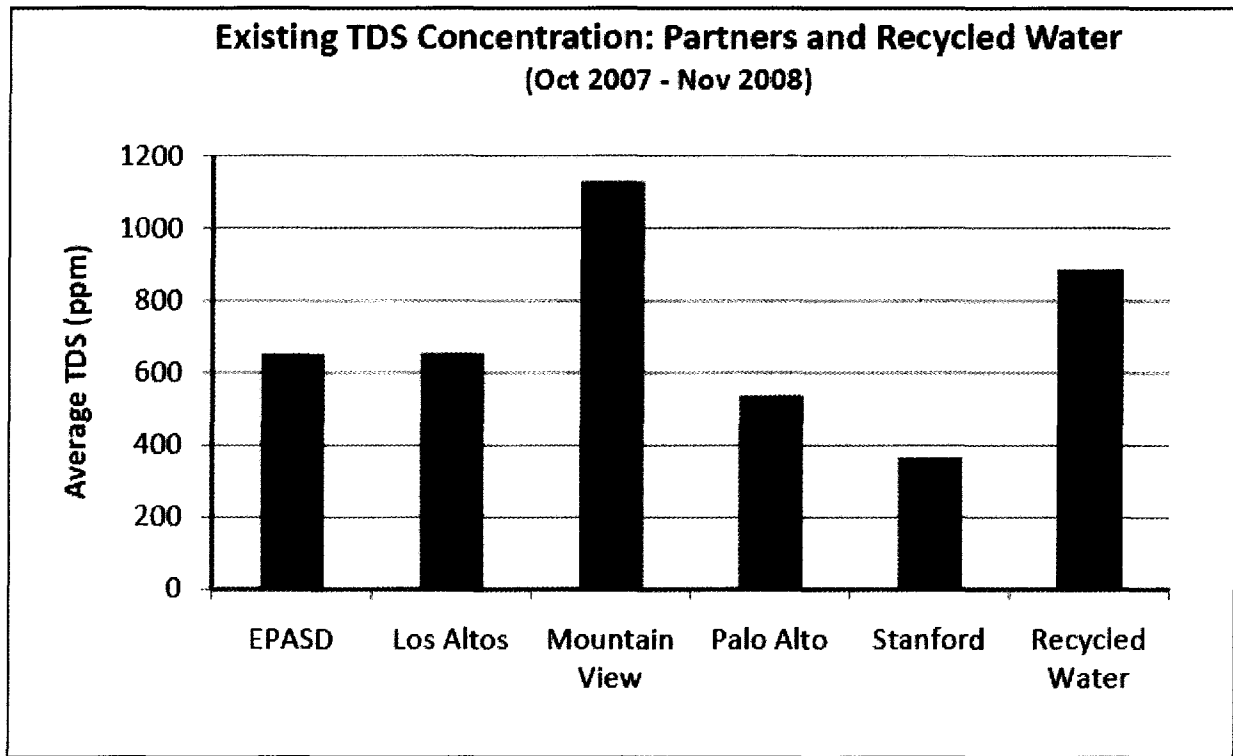
Total Dissolved Solids (TDS) is a common measure of the salinity in a water system. In general, the higher the TDS, the more soil, plant, and irrigation management will be required when using recycled water for landscape irrigation. The total amount of TDS in recycled water depends on a variety of factors, including, but not limited to, the TDS levels of the potable source water, the level of industrial/commercial inflow into the system, water softener use, and infiltration into the sewer collection system from highly saline groundwater areas. Throughout California, different recycled water retailers produce recycled water with a wide range of TDS levels (as shown in Chart I below). The City of San Diego produces recycled water with a TDS level approaching 1000 parts per million (PPM), compared to a potable source water level of approximately 500 PPM. In northern California, the South Bay Water Recycling system has a TDS level of 700-750 PPM, compared to a source water concentration of approximately 300 PPM.

*Chart I: TDS level comparison in potable and recycled water supplies in California*



The Regional Water Quality Control Plant (RWQCP) serves the cities of Palo Alto, Los Altos, and Mountain View, the East Palo Alto Sanitary District, the town of Los Altos Hills and Stanford University. The TDS levels in the recycled water from the RWQCP currently are in the 850 to 900 PPM range, however the TDS level of influent into the RWQCP from the partner agencies varies considerably. Considering the high quality of the potable water source for most of the RWQCP partners, the current TDS levels are higher than expected. There are several reasons for the elevated TDS levels, but the primary controllable source is infiltration into the wastewater collection system in the Baylands area where the groundwater salinity level is high. The RWQCP's partners' influent TDS levels are depicted in Chart II below and demonstrate the TDS variations between the different partners.

Chart II: RWQCP Partner TDS concentrations and Total Recycled Water TDS levels



Staff is recommending that a Recycled Water Salinity Reduction Policy be adopted to facilitate a focused effort to reduce TDS levels over time. The proposed Salinity Policy will provide a basis to implement activities to achieve those results. Based on the existing TDS levels and comparisons with other recycled water providers, it is apparent that there is an opportunity to further reduce the TDS levels of the recycled water from the RWQCP by working with individual RWQCP partners.

Regulatory limits for TDS for landscaping do not exist because landscape requirements are driven by individual site soil conditions. However, the establishment of a quantitative goal based on elimination of infiltration will assist the RWQCP partners and the City in efforts to reduce the TDS levels to a level one would expect given the source water for the service area of the RWQCP. The Salinity Policy contains a TDS goal of 600 PPM. Staff has estimated that this level can be achieved without modifying normal human or industrial activities, but rather by controlling saline groundwater infiltration.

The TDS goal of 600 PPM was derived, in part, by starting with the aggregate source water for the RWQCP partner agencies, which has a TDS of about 100 PPM. Unavoidable, normal human activities typically add about 350-400 PPM to the source water. Another 100-150 PPM was added as a buffer since it is impossible to completely stop all intrusion of saline groundwater into the wastewater collection systems, for a total of 600 PPM.

The 600 PPM TDS goal was developed based upon what should be achievable, employing best engineering practices. It is not based on the requirements of living plants for irrigation. As stated above, the variability and importance of soil conditions and individual plant types have prevented resource agencies from establishing such standards for irrigation. However, the 600 PPM TDS goal is slightly less than the 640 PPM level recommended by the Stanford Real Estate Office (REO) in their November 24, 2009 comments to the City. While staff cannot establish standards for irrigation, it appears that a 600 PPM TDS goal is consistent with recommendation of the Stanford REO, despite their different basis. When reviewed by the Utilities Advisory Commission at its December 2, 2009 meeting, the Stanford REO indicated that it supported the establishment of a 600 PPM TDS goal, while pointing out that other constituents (components of TDS such as Sodium) must also be addressed (see Attachment D). Staff will address these other constituents in the future. For now, the critical action is to establish a goal and begin to take action toward that goal. The goal can be amended in the future as more information and analysis becomes available.

The RWQCP has already identified a preliminary list of efforts that can be implemented or that are in the process of implementation in support of the Salinity Policy. Notable examples include:

- The City of Mountain View has just eliminated the sewer discharge of 3 saline wells in the north of Bayshore area. This action alone should reduce the TDS to 800 PPM.
- The RWQCP will continue to monitor potential saltwater intrusion “hotspots” and communicate the results to the relevant RWQCP partners.
- The RWQCP will develop a database to track salinity data and other investigative work
- Utilities will coordinate implementation of the recently approved Sanitary Sewer Management Plan (CMR: 303:09) to manage the Palo Alto wastewater collection system and identify inflow and infiltration reduction actions.
- The RWQCP will develop a groundwater management plan to coordinate salinity reduction activities with the RWQCP partners and prepare for expanded recycled water application. This groundwater management plan will be coordinated with the Santa Clara Valley Water District, which has jurisdiction over the groundwater basins in Santa Clara County.

The benefits of achieving the TDS goal in the Salinity Policy include greater acceptance of the use of recycled water. Recycled water is currently blended with potable water when used on the Municipal Golf Course and at Greer Park. It is expected that reducing the salinity of the water will enable a greater fraction of recycled water to be used by these existing recycled water customers. These efforts and the efforts to expand the recycled water system to serve new customers will help the City reduce its consumption of potable water and reduce treated effluent flow to the Bay.

#### **COMMISSION REVIEW AND RECOMMENDATIONS**

The proposed Salinity Policy was presented to the UAC at its meeting on December 2, 2009. The UAC discussed what establishing this goal and adopting this policy means since there is no enforcement provision. Staff responded that adopting the policy is a first step to addressing recycled water salinity and that additional steps may have to be taken if the policy is ineffective. The UAC also questioned what Palo Alto would have to do since it appears to have influent below the goal level. Staff added that Utilities wastewater collection system Capital

Improvement Projects (CIPs) already address repairs and replacements of the pipes and will continue to do so.

The Stanford Real Estate Office provided comments on the proposed policy stating that it supported the policy, but noted that there are other constituents besides TDS that may be a concern. The UAC asked if staff plans to address these other recycled water quality components. Staff stated that additional constituents would be addressed in the environmental document for the Palo Alto Recycled Water Project and that it may propose policies for additional constituents in the future.

Commissioner Waldfogel said that he was not convinced that any extra money should be spent on fixing wastewater collection system pipes since no data was presented that showed the relationship between TDS levels and potential recycled water use. He stated that the real goal is to reduce potable water usage and that staff should determine how much more recycled water would be used if TDS levels were reduced to 600 PPM. In addition, staff did not state how much money may be spent to achieve the 600 PPM goal. Staff responded that the Utilities CIP budget for its wastewater collection enterprise is very predictable and funds in addition to the already planned CIPs are not anticipated to be necessary for Palo Alto. Staff has no plans to conduct an analysis of the relationship between TDS levels and expected recycled water use. The assessment of recycled water use assumes that the recycled water will be of acceptable water quality to end users.

The UAC voted to recommend that the Council adopt the proposed Salinity Policy by a vote of 4-1 with Commissioner Waldfogel voting no. Commissioner Ameri recused himself from the discussion and vote and Commissioner Berry was absent. The notes from the UAC meeting are provided as Attachment C.

### **RESOURCE IMPACT**

The City of Palo Alto has an aggressive wastewater collection system Capital Improvement Program (CIP) which identifies and evaluates issue areas and prioritizes projects to manage available funding. By its very nature the CIP has inherent TDS reduction benefits, as demonstrated by the City's current TDS levels entering the RWQCP. Staff does not anticipate any additional CIP cost or structural changes are needed at this time to accommodate the Salinity Policy.

The City will coordinate implementation of the Salinity Policy with the other RWQCP partners. It is unknown at this time what additional costs could be borne by the other RWQCP partners towards achieving this policy goal.

### **POLICY IMPLICATIONS**

Continuing the exploration of expanding the use of recycled water in Palo Alto is consistent with Council policy. The Council has supported this goal through approval of the Water Integrated Resources Plan (WIRP) Guidelines in December 2003 [CMR:547:03], specifically, WIRP Guideline #3: Actively participate in development of cost-effective regional recycled water plans. Council also approved ordinance No. 5002 in May 2008 [CMR:203:08] adding Chapter

16.12 to Title 16 of the Palo Alto Municipal Code to require the use of recycled water for irrigation, toilet and urinal flushing and trap priming.

The City's Sustainability Policy supports the development of recycled water, specifically in the policy's statement to "reduce resource use and pollution in a cost-effective manner while striving to protect and enhance the quality of the air, water, land, and other natural resources."

The City's Comprehensive Plan contains Natural Environment Goal N-4: Water resources that are prudently managed to sustain plant and animal life, support urban activities and protect public health and safety. Specifically, Program N-26 addresses the use of recycled water: Implement incentives for the use of drought-tolerant landscaping and recycled water for landscape irrigation.

**ENVIRONMENTAL REVIEW**

Approval of the Recycled Water Salinity Reduction Policy is not a "project" under the California Environmental Quality Act, because the Salinity Policy does not involve any commitment to a specific project with may result in a potentially significant physical impact on the environment, as contemplated by Title 14, California Code of Regulations, Section 15378(b)(4).

**ATTACHMENTS**

- A. Resolution
- B. Proposed Recycled Water Salinity Reduction Policy
- C. Excerpts – Draft Minutes from the December 2, 2009 UAC meeting
- D. Stanford Real Estate Office Testimony at the December 2, 2009 UAC meeting

**PREPARED BY:**

 **NICOLAS PROCOS**  
Senior Resource Planner

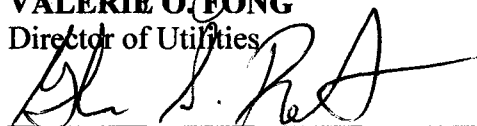
 **PHIL BOBEL**  
Environmental Compliance Manager

**REVIEWED BY:**

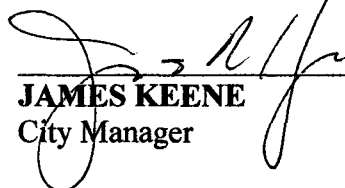
 **JANE O. RATCHYE**  
Utilities Assistant Director, Resource Management

**DEPARTMENT APPROVAL:**

  
\_\_\_\_\_  
**VALERIE O. FONG**  
Director of Utilities

  
\_\_\_\_\_  
**GLENN ROBERTS**  
Director of Public Works

**CITY MANAGER APPROVAL:**

  
\_\_\_\_\_  
**JAMES KEENE**  
City Manager

Resolution No. \_\_\_\_\_  
Resolution of the Council of the City of Palo Alto Establishing  
a Salinity Reduction Policy for Recycled Water

WHEREAS, the Regional Water Quality Control Plant (RWQCP) serves the Cities of Palo Alto, Los Altos, and Mountain View, the East Palo Alto Sanitary District, the Town of Los Altos Hills and Stanford University; and

WHEREAS, the City of Palo Alto currently uses tertiary treated wastewater from the RWQCP to irrigate the Palo Alto Municipal Golf Course, Greer Park, the Emily Renzel Marsh and portions of the Palo Alto Duck Pond; and

WHEREAS, the City of Mountain View, a RWQCP partner, will begin delivering recycled water from the RWQCP to end users in Mountain View in Summer 2010; and

WHEREAS, the City of Palo Alto is investigating an expansion of the recycled water delivery system to serve predominantly irrigation customers within the Stanford Research Park; and

WHEREAS, although regulatory limits for Total Dissolved Solids (TDS, a common measure of the salinity in a water system) do not exist, recycled water from the RWQCP contains higher than expected TDS levels compared to the average potable source water concentrations of the RWQCP partners; and

WHEREAS, the establishment of a quantitative TDS goal based on elimination of saltwater infiltration from the Baylands will assist the RWQCP's efforts to reduce the TDS level to a level one would expect given the RWQCP partners' source water; and

WHEREAS, City of Palo Alto, as managing partner of the RWQCP and in partnership with the other RWQCP partners, has developed a Recycled Water Salinity Reduction Policy to identify and pursue all cost effective measures to reduce the salinity of the recycled water over time.

NOW, THEREFORE, the City Council of the City of Palo Alto does hereby RESOLVE as follows:

SECTION 1. The Council approves the Recycled Water Salinity Reduction Policy, attached as Exhibit A.

SECTION 2. The Council authorizes City Utilities Department and RWQCP staff to coordinate implementation of the Recycled Water Salinity Policy with the RWQCP partners

**NOT YET APPROVED**

SECTION 3. The Council directs City staff to submit biannual progress reports to Council on the effort to reduce the Total Dissolved Solids levels in the RWQCP's recycled water.

SECTION 4. In compliance with the CEQA, Council finds that the approval of the Salinity Reduction Policy is not a "project" under CEQA, because the Policy does not involve any commitment to a specific project which may result in a potentially significant physical impact on the environment, as contemplated by Title 14, California Code of Regulations, Section 15378(b)(4).

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

APPROVED:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM:

\_\_\_\_\_  
Deputy City Attorney

\_\_\_\_\_  
City Manager



**CITY OF PALO ALTO**  
**RECYCLED WATER SALINITY REDUCTION POLICY**

**POLICY STATEMENT**

Recycling treated wastewater is increasing in the arid West as a response to the fact that populations are increasing and fresh water supplies are not. Palo Alto and other communities are using treated wastewater for landscape irrigation and that use is expected to grow dramatically in the future. Salts accumulate in water when it is used by people and industrial processes. To maximize the use of recycled water on the widest variety of green plants, the salt content (salinity) needs to be minimized. The purpose of this policy is to ensure that the City is taking all practical steps to reduce salinity in recycled water.

Therefore, it shall be the policy of Palo Alto to prevent unnecessary additions of salt to the sewer system, with a goal of lowering the Total Dissolved Solids (TDS) in the recycled water to less than 600 parts per million (PPM).

**Applicability of this Policy**

Palo Alto shall utilize this policy and its 600 PPM Total Dissolved Solids (TDS) goal to develop salinity control measures. Palo Alto owns and operates the Regional Water Quality Control Plant (RWQCP), which treats wastewater from Palo Alto and five other communities. The RWQCP Partners, including Palo Alto, will be asked to identify controllable salt inputs to wastewater from their communities and to implement control measures.

**PROCEDURES**

Staff estimates that the wastewater TDS can be reduced to 600 PPM without modifying normal human use or industrial activities. The major way in which salts can be reduced is by controlling the infiltration of saline groundwater which is currently entering sewer pipes through cracks and problem areas in those pipes as they cross saline areas near San Francisco Bay. Other sources of controllable salt must also be explored.

The activities that will be completed to implement this policy include:

1. Determine the salinity levels for each entity whose wastewater is treated by the RWQCP.
2. Identify the sources of salinity.
3. Develop alternatives for reducing the salinity levels.
4. Identify the actions that can be implemented to meet the TDS goal.
5. Prepare Salinity Reduction Plan.
6. Monitor TDS and report to Council semi-annually on progress towards meeting the TDS goal.

Note: Questions and/or clarifications of this policy should be directed to the Public Works Department.

**DRAFT  
UTILITIES ADVISORY COMMISSION  
EXCERPT MINUTES OF DECEMBER 2, 2009**

**ITEM 1: ACTION ITEM: Recommendation to Approve Recycled Water Salinity Reduction Policy**

When the item was announced, Commissioner Ameri indicated that he would recuse himself from the discussion of this water related issue since he works for a water agency in the East Bay that receives water from the same supplier as Palo Alto. He explained that there was no financial conflict of interest, but since there could be a perception of a conflict, he has chosen to not participate in the discussion. He left the room for the item.

Senior Resource Planner Nicolas Procos provided a presentation to the commission summarizing the written report. Environmental Compliance Manager for the Regional Water Quality Control Plant (RWQCP), Phil Bobel, also contributed to the report and was available for questions. He briefly reminded the Commission about the Palo Alto Phase 3 project that would provide about 900 acre-feet per year to the Stanford Research Park. The recycled water quality is a concern with respect to the use of recycled water for irrigation of landscaping, especially certain salt-sensitive species such as redwoods. Palo Alto's recycled water has a higher content of Total Dissolved Solids (TDS), a salinity indicator, than would be expected given the extremely low TDS in the source potable water in the service area of the RWQCP. The plant partner making the biggest contribution of salt to the plant is Mountain View. It is the only partner whose influent to the plant has a TDS of above 650 parts per million (PPM).

Procos explained that the proposed Recycled Water Salinity Reduction Policy establishes a TDS goal for recycled water produced by the plant of 600 PPM. This goal was developed using the following assumptions:

- The source water for the different agencies has very low TDS levels (~100 PPM in aggregate)
- Normal, unavoidable, human activities will contribute an additional 350-400 PPM to the total TDS levels
- A buffer of 100-200 PPM is needed as it is impossible to completely eliminate saline groundwater infiltration.

Procos further explained that the policy does not have an enforcement mechanism, although that could be a future feature. The policy does not provide, nor is it based on, an assessment of what number represents a suitable TDS level for irrigation purposes. This issue will be addressed in the near future during the environmental review phase for the Palo Alto Recycled Water (Phase 3) Project. In addition, the policy does not establish a firm "delivery guarantee" for future recycled water users.

Public comment on Item #1:

Jim Inglis, Director of Design and Construction for the Stanford Real Estate Office read prepared comments on the proposed Recycled Water Salinity Reduction Policy and provided the comments in writing:

- "It is positive that the City is promoting a policy to minimize salinity in its recycled water. The proposed salinity reduction policy is an important first step, and as we support efforts by Palo Alto to take the lead and coordinate with the communities served by the Regional Water Quality Control Plant to identify salt inputs to their wastewater and to develop an implement concrete measures to control salinity.
- "We realize that tonight the UAC is not addressing the specific issues associated with managing the use of recycled water for landscape irrigation. However, we want to present our concerns to the UAC, so that it is aware of the issues that may arise as the City moves forward with its recycled water program.
- "The City is considering potential future use of recycled water to irrigate landscaping at the Stanford Research Park, which contains many salt-sensitive plantings and soils with poor drainage. We understand that the City intends at some point in the future to reinstate the environmental review process for such use, and we understand that, as part of the process, the City will examine and consider the deleterious salinity impacts to plants and trees such as coastal redwoods.
- "As reflected in the Recycled Water Guidelines prepared by HortScience that we have submitted to the City, we believe it is essential that potential future use of recycled water for landscape irrigation include appropriate mitigation and management measures. These measures, when they are ultimately adopted by the City, should include enforceable limits for all of the relevant constituents of concern for salinity, as identified in HortScience's Guidelines, and not just a single constituent such as total dissolved solids. These measures should also recognize that recycled water failing to meet the appropriate limits for salinity should not be used to irrigate salt-sensitive landscaping."

Herb Borock, Palo Alto resident, commented that when the recycled water project has been presented by staff in the past, the price and fee schedule for the recycled water does not cover the cost of the project. Staff has compared the cost of the project to the wholesale cost of water, but it should have been compared to the retail rates, which are four times the wholesale rate. Staff should look at all costs of recycled water when establishing prices for recycled water to avoid potable water users subsidizing those who use recycled water.

Commissioner Foster asked about the status of Palo Alto's recycled water project. Procos replied that the planning has been completed, including development of a cost estimate of about \$33 million. Foster asked if the project will address the concerns raised about recycled water quality. Procos confirmed that the environmental document would address that issue.

Commissioner Eglash asked why staff said that there would be no cost to Palo Alto to implement the policy. Procos responded that Palo Alto's wastewater collection system CIPs are doing the job well of repairing leaks, which reduces the introduction of saline groundwater into the wastewater collection system. Bobel added that the partners also understand the problem and Mountain View is moving forward to repair or modify its systems.

Commissioner Eglash noted that the approach was not to set a goal at a level to meet irrigation needs, but to see what is reasonable based on source water quality and what is achievable. Procos confirmed that this was correct. Bobel added that it's very difficult to establish an acceptable level for irrigation needs since it depends on many factors such as soil types, drainage conditions, and plant materials. Eglash asked how staff plans to address the other constituents besides TDS. Bobel responded that they will be addressed in the environmental document.

Commissioner Keller asked what adopting this goals means since it is not enforceable. Fong stated that it was important to establish a goal as a first step. Bobel added that enforcement may need to be added in the future, but it may not be easy as there are many contracts that govern operations of the plant and responsibilities of the plant and the partner agencies. These contracts cannot be unilaterally changed by Palo Alto. Keller asked how motivated the partners are to adopt such a policy. Bobel responded that Mountain View is motivated since it is using the recycled water now. Keller asked about the timeline for achieving the goal. Bobel said that it relates to how fast Mountain View can respond by re-directing its CIPs or spending more on the repairs or taking a longer time to complete them. Keller asked if goals would be established for other constituents. Bobel said that that plant is working on this now and installing improved monitoring to track these constituents and determine where they are coming from and the impacts of the treatment process on them.

Commissioner Waldfogel stated that the overall objective of the policy is to reduce the potable water use. He wanted to see how much more recycled water could be used by achieving the goal. Procos said that this analysis has not been done, but that lower TDS will make the water more acceptable and make the exemption process in the Recycled Water Mandatory Use Ordinance less likely to be needed to protect certain landscaped areas. Waldfogel questioned whether reducing TDS would increase usage of recycled water. Bobel said that if we wait to agree on a magic number, work will never get started.

Council Member Yeh stated that if there were no enforcement mechanism, why call it a policy, rather than a goal or a target. Since it is presented as a policy, he suspects that Council may ask questions about the costs, benefits and environmental impacts of implementing the policy. Bobel noted that policies are the tool that Council uses for these types of actions and that staff can use them to show Council support for programs. Assistant Director Jane Ratchye also stated that the RWQCP has successfully used this mechanism in the past on several occasions, but that they hadn't gone through the UAC and that it was possible that Council Member Yeh had not see such a policy in his tenure on the Council. Bobel confirmed that the plant has used the policy mechanism where Palo Alto first adopts a policy developed by RWQCP staff and then the policies are adopted by the other plant partners. He cited examples of using the policy mechanism to reduce mercury and pesticides, but acknowledged that it was before Yeh was on the Council and that, since they are related to wastewater, and not recycled water, the policies had not been considered by the UAC.

Council Member Yeh questioned whether the goal of 600 PPM would have cost implications and whether an environmental review should be completed first. He asked if the environmental analysis that will be completed for the recycled water project will show the relationship between the

amount of water used and TDS values of 400, 500, 600, 700, etc. PPM. Bobel stated that the goal of 600 PPM was arrived at in two ways: One method was to add allowances for human activity and for the fact that one can't stop all infiltration to the TDS of the aggregate source water; the second method was to determine the outcome if Mountain View fixed the problems that have been identified.

Chair Melton asked the Commission to stay focused on this policy and noted that the environmental document is not being considered at this time. He added that the Stanford Real Estate Office has indicated support for the policy and has indicated an acceptable TDS value that is in line with the goal in the policy. He indicated that he supports Palo Alto taking the lead and hopes that the other partners will follow suit.

Commissioner Keller asked if there is a Plan B if the policy doesn't work. Bobel responded that the plant will continue to assist the partners in finding problem areas that need to be fixed. Keller added that she has heard about many issues with the use of recycled water and knows that Palo Alto has been using recycled water on the Municipal Golf Course and at Greer Park. She asked if we are doing baseline studies prior to the application of recycled water. Bobel responded that there are baseline studies being done in Mountain View to monitor selected locations that will receive recycled water. This will need to be done in the Stanford Research Park as well. Procos added that the environmental document will have to address this, too.

Commissioner Waldfogel commented that the goal was good, but that he has trouble since no analysis was provided about how much money may be spent to achieve the goal and how much additional potable water would be saved by achieving the goal. He also noted that the policy seems to not require Palo Alto to do anything, but it may obligate others (i.e. Mountain View) to spend millions of dollars. Commissioner Eglash added that he was concerned that some partners might be expected to reduce further and that Palo Alto should not have to do anything. He would much rather see a policy that conveys that Mountain View is the problem.

Commissioner Foster asked if Palo Alto should be the first to adopt the policy, or whether Mountain View should go first. Bobel said that Palo Alto, as the operating partner of the RWQCP, always leads. This has been the practice in the past on many policies of this type.

Council Member Yeh expressed concern about the lack of enforcement for the policy and wondered what has been done in the rest of the country. Bobel said that he was not aware of any such policy for TDS for any other wastewater treatment plant. Council Member Yeh also suggested that staff delay taking the policy to the Council to provide him/others some time to do outreach to Mountain View to assess its Council's willingness to also adopt such a policy.

Chair Melton noted that the protocol in the past is that Palo Alto initiates and then the other plant partners follow.

Commissioner Eglash asked why the goal was put on the recycled water output rather than on the plant influent. Bobel said that this is in the spirit of cooperation and not to complicate it since each partner has a slightly different water supply source mix.

Commissioner Eglash stated that if staff thinks that the policy would be a useful tool to get partners to act, he is supportive of it.

Commissioner Waldfogel asked if the best way to achieve the goal is to adopt this policy. He questioned whether it would be productive to show how Palo Alto is doing well, but that Mountain View is not.

**ACTION:** Commissioner Eglash made a motion that the UAC recommend that the Council adopt the proposed Recycled Water Salinity Reduction Policy. Chair Melton seconded the motion. The motion passed (4-1) with Commissioner Waldfogel voting NO.

After the item was completed, Commissioner Ameri returned to the meeting.

Jim Inglis  
Director of Design & Construction  
Stanford University — Office of Real Estate

Stanford University's Comments on  
City of Palo Alto's Proposed Recycled Water Salinity Reduction Policy

Utilities Advisory Commission Meeting  
Wednesday, December 2, 2009

- Brief introduction
- It is positive that the City is promoting a policy to minimize salinity in its recycled water. The proposed salinity reduction policy is an important first step, and we support efforts by Palo Alto to take the lead and coordinate with the communities served by the Regional Water Quality Control Plant to identify salt inputs to their wastewater and to develop and implement concrete measures to control salinity.
- We realize that tonight the UAC is not addressing the specific issues associated with managing the use of recycled water for landscape irrigation. However, we want to present our concerns to the UAC, so that it is aware of the issues that may arise as the City moves forward with its recycled water program.
- The City is considering potential future use of recycled water to irrigate landscaping at the Stanford Research Park, which contains many salt-sensitive plantings and soils with poor drainage. We understand that the City intends at some point in the future to reinitiate the environmental review process for such use, and we understand that, as part of that process, the City will examine and consider the deleterious salinity impacts to plants and trees such as coastal redwoods.
- As reflected in the Recycled Water Guidelines prepared by HortScience that we have submitted to the City, we believe it is essential that potential future use of recycled water for landscape irrigation include appropriate mitigation and management measures. These measures, when they are ultimately adopted by the City, should include enforceable limits for all of the relevant constituents of concern for salinity, as identified in HortScience's Guidelines, and not just a single constituent such as total dissolved solids. These measures should also recognize that recycled water failing to meet the appropriate limits for salinity should not be used to irrigate salt-sensitive landscaping.