

# **MEMORANDUM**

TO: CITY COUNCIL

FROM: STEVEN ADAMS, CITY MANAGER

SUBJECT: CONSIDERATION OF GROUNDWATER MONITORING AND TEST

FINDINGS AND ADOPTION OF INTERIM URGENCY ORDINANCE ESTABLISHING A 45 DAY MORATORIUM ON THE APPROVAL OF

**DEVELOPMENT PROJECTS** 

DATE: NOVEMBER 10, 2009

#### **RECOMMENDATION:**

It is recommended the Council: 1) review groundwater monitoring and testing results; 2) adopt an Interim Urgency Ordinance establishing a 45-day moratorium on the approval of development projects; 3) authorize the Mayor to sign a letter in conjunction with Grover Beach, Oceano and Pismo Beach requesting the County make available excess State water at the Lopez turnout on a temporary and emergency basis; and 4) direct staff to seek public input and prepare recommendations to address water supply and potential seawater intrusion issues.

## **FINANCIAL IMPACT:**

There is no projected financial impact from adoption of the Interim Urgency Ordinance. There are significant costs associated with water supply measures that will be evaluated.

#### **BACKGROUND:**

During development of the City's 2001 General Plan and 2005 Urban Water Master Plan, the lack of water resources was identified as a significant issue. At the August 24, 2004 meeting, the City Council reviewed a Water Alternatives Study identifying 17 alternatives for Council consideration. Since that time, a number of presentations have been considered by the City Council regarding water alternative study results.

In 2008, it was determined the City had utilized 99% of its water entitlements. At the August 12, 2008 meeting, the City Council approved a Resolution declaring a "severely restricted water supply condition." Mandatory conservation measures were enacted.

Feasibility studies and efforts have been prepared on the following water supply alternatives:

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- Nacimiento Water project
- Price Canyon oil field recycled water
- Desalination
- Recycled water
- Raising of the spillway at the Lopez Lake dam

A number of cost, environmental and regulatory challenges associated with these alternatives have been identified. Additional studies are currently being prepared on recycled water and raising the spillway at the Lopez Lake dam in response to direction received from the City Council at the September 9, 2009 meeting.

Meanwhile, the City's water conservation program and tiered rate structure were expanded, which have been successful in reducing water usage by 10% over the past year. In January 2009, the City entered into a 5-year temporary water purchase agreement with the Oceano Community Service District (OCSD). Efforts are also under way to determine the feasibility of obtaining State water from the County's excess allocation (subject to voter approval) and to activate Well #10 and reactivation of Well #11.

In early 2008, a groundwater study was prepared by Todd Engineering in coordination with Grover Beach, Pismo Beach and OCSD (northern cities overlying the Santa Maria groundwater basin) to determine if groundwater allocations could be increased. The results did not justify any increase in the safe yield, but did indicate that the basin was not in an overdraft condition at the time. It was recommended that a well monitoring program be initiated in response to conditions of the Santa Maria Groundwater Basin adjudication judgment and to better assess safe yield in the future.

In early 2009, a groundwater monitoring program created by Todd Engineering was implemented consistent with the Santa Maria Groundwater Basin adjudication judgment and the 2008 Annual Monitoring Report, Northern Cities Management Area. As part of the overall monitoring plan, a program was also developed to sample and analyze water quality in sentry wells located along the coast. There are four sentry well clusters near the Northern Cities shoreline, distributed from Pismo Beach in the north to south of Oceano within the Oceano Dunes State Vehicular Recreation Area. Each of the four sentry well clusters includes multiple individual monitoring wells that tap distinct aquifer zones. Groundwater levels in the sentry wells were measured and water quality samples were taken in May and August 2009.

The groundwater monitoring and test results were presented to the City Council for preliminary review at the October 27, 2009 meeting. At that time, Council Member Guthrie requested staff prepare a letter to the County of San Luis Obispo to seek their cooperation in identifying and activating an additional test well that had

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previously been abandoned. However, it was later determined that the well has been located, but there are issues that have prevented its use.

# **ANALYSIS OF ISSUES:**

The Annual Monitoring Report documented low groundwater levels, including a broad range of groundwater levels below mean sea level that extended inland from the coast to encompass most of the major local municipal well fields. The low groundwater levels along the coast indicate a potential for seawater intrusion into the freshwater aquifers of the groundwater sub-basin. Seawater intrusion is a serious threat. Seawater is highly saline (with typical chloride concentrations of 19,000 mg/L) and mixing of even a small amount, as little as two percent, with groundwater is enough to make the water undrinkable. Once seawater has intruded and mixed in a groundwater basin, it is very difficult and costly to remove.

The water quality sampling of the sentry wells in May 2009 showed early chemical signs of seawater intrusion in one of the sentry well clusters, located near Oceano. Indicators at this well include increased concentrations of key constituents (such as chloride) and specific geochemical signatures similar to seawater. The deep and intermediate wells in this sentry well cluster have shown low groundwater levels for the past two years.

The May 2009 monitoring event revealed partial filling or blocking of several wells, and generally overdue maintenance at all of the wells. Accordingly, in August 2009 the sediment was removed, water levels were measured and the sentry wells were sampled again. A cluster of observation wells owned by OCSD was also sampled.

The second round of water quality sampling in August 2009 confirmed the preliminary findings from May 2009 that showed signs of seawater intrusion in the sentry well cluster near Oceano. Moreover, while most of the results from the other sentry wells showed little change, the August data from the sentry well cluster near Oceano showed that water quality in the middle and deep wells deteriorated significantly from May to August 2009. This indicates further intrusion onshore of the mixing zone that typically separates onshore fresh groundwater from offshore seawater.

Given available data, it is difficult to determine the potential extent or cause(s) of the problem, as well as the impact of the condition on the safe yield of the basin. However, it is clear that the test results further underscore concerns regarding the City's current water supply and immediate action is necessary. A number of meetings have been held with staff representatives from Pismo Beach, Grover Beach and the OCSD to develop a joint strategy. A consultant has been retained to prepare a peer review of the Todd Engineering report in order to confirm the conclusions. Immediate short-term measures being evaluated include the following:

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- Temporary purchase of water from Avila Beach Community Services District;
- Increase of State water usage by OCSD to decrease groundwater use near the sentry well cluster in question;
- Trade of Lopez Water for groundwater with Pismo Beach in order to reduce groundwater pumping by Pismo Beach near the sentry well cluster in question;
- Temporary allocation of State water from the County;
- Development of a groundwater model to determine accurate data analysis on the extent and cause of potential seawater intrusion;
- Coordination of efforts with Nipomo and agricultural landowners; and
- Expansion of water conservation measures.

Long-term measures jointly being studied by the jurisdictions include raising the Lopez Lake spillway, obtaining State water, and development of a recycled water system. A recycled water system is particularly important since it could include an injection system designed to establish a seawater barrier at locations where seawater intrusion has been demonstrated to be a threat.

Given these issues, approval of additional development projects at this time may conflict with Policy LU11-3.1 of the City's Fringe and Urban Area Land Use Element, which limits the "number of dwelling units within the City to that which is consistent with the long-term availability of resources needed to support area population and that which public services and facilities can adequately support." This, in turn, impacts the City's ability to meet housing and economic development needs also set forth in the City's General Plan. Ongoing affordable housing, economic development, Green Corridor and other projects may be proposed within the next few months. It is important to develop a comprehensive strategy to address water supply and potential seawater intrusion issues prior to consideration of such projects.

The City is also in the process of updating the Housing and Conservation Elements. Water resources will be a critical factor in these two plans. Therefore, it is important to determine how water resources will be addressed in the final updates prior to consideration of additional project approvals.

As a result, staff recommends the City Council adopt an Interim Urgency Ordinance adopting a moratorium on the approval of development projects, which is attached for consideration. Consistent with State law, the moratorium would be effective for a 45-day period, but staff anticipates it may be necessary to extend it an additional three to five month period. Projects that have been approved or have submitted applications deemed complete and are in process would not be subject to the moratorium. Time extension requests for previously approved projects would be processed, but may be amended to include the City's current mitigation measure to offset any proposal increase in water use.

# CITY COUNCIL CONSIDERATION OF GROUNDWATER MONITORING AND TEST FINDINGS AND ADOPTION OF INTERIM URGENCY ORDINANCE ESTABLISHING A 45DAY MORATORIUM ON THE APPROVAL OF DEVELOPMENT PROJECTS NOVEMBER 10, 2009 PAGE 5

The purpose of the moratorium would be to provide staff time to develop the following studies and recommendations in order to address water resources for future development projects consistent with the City's General Plan policies:

- Additional tests from the sentry wells after the rainy season to determine what level of the prior test results can be attributed to the current drought conditions;
- More detailed analysis and recommended strategies to address the potential threat of seawater intrusion on a short-term and long-term basis;
- Update of data on City water use and how it will be impacted by projected use from projects approved and those with completed applications in process to accurately determine the level of future development that can be accommodated with existing water resources;
- Completion of studies on recycled water, raising the spillway at Lopez Lake and the feasibility of obtaining State water to facilitate decisions on future water supply projects;
- Recommendations and water production projections associated with activation of Well #10 and reactivation of Well #11; and
- Recommendations regarding appropriate mitigation measures for future projects.

The purpose of the effort will be to enable development to proceed in order to address community needs set forth in the General Plan, but to do so while ensuring the City's water resources are managed in a responsible manner.

Efforts have also been initiated to obtain a substantial volume of State water on an emergency basis to temporarily minimize groundwater usage to rest the basin and relieve the seawater pressure. The County of San Luis Obispo has an excess allocation of State water in the amount of about 15,000 acre feet. Given current delivery expectations, about 6,000 acre feet of "wet water" could be available on an emergency basis to agencies in San Luis Obispo County. The Mayor and City Manager have met with the local County Board of Supervisors' representatives, County staff and other South County city managers and mayors to discuss the process for obtaining a temporary allocation. Since a public vote would be required for Arroyo Grande to purchase State water, it is not proposed that the City pursue an immediate allocation. However, by providing additional water to neighboring jurisdictions, it could reduce their groundwater use. It could also free up additional Lopez Lake water for Arroyo Grande to reduce our groundwater pumping.

It is further recommended that staff initiate a public engagement process regarding water supply recommendations in association with the Conservation Element Update process. There are a number of alternative strategies, which all appear to be costly and will impact the public. Potential purchase of State water would require voter

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approval and all rate impacts are subject to protest vote limitations. Therefore, it is important the public be involved and educated in order to move forward with a successful strategy.

# **ALTERNATIVES:**

The following alternatives are provided for the Council's consideration:

- Approve staff's recommendations;
- Do not approve a moratorium, but instead rely on project mitigations on a case by case basis;
- Provide other direction to staff.

# **ADVANTAGES:**

The Interim Urgency Ordinance will provide staff time to effectively assess the ability of the City's current water resources to accommodate future development, develop recommendations for future water supply projects, and determine how best to address the threat of seawater intrusion into the City's groundwater supply. Therefore, a short term moratorium is an important step in ensuring water resources are being managed responsibly, but should not significantly delay or impact projects important to meet the needs of the community.

#### **DISADVANTAGES:**

While recommendations are designed to limit impacts on development, if no feasible measures are developed to address water supply issues, it could ultimately result in delays to projects important to meet housing, economic development, public services and other community needs.

#### **ENVIRONMENTAL REVIEW:**

Adoption of the interim Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Sections 15061(b)(3), 15262 and 15306 of the State CEQA Guidelines.

## **PUBLIC NOTIFICATION AND COMMENTS:**

The Agenda was posted in front of City Hall on Thursday, October 22, 2009 and on the City's website on Friday, October 23, 2009. No comments were received.

## INTERIM URGENCY ORDINANCE NO.

AN INTERIM URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ARROYO GRANDE ADOPTING A MORATORIUM ON THE APPROVAL OF DEVELOPMENT PROJECTS, AND DECLARING THE URGENCY THEREOF

THE CITY COUNCIL OF THE CITY OF ARROYO GRANDE DOES ORDAIN AS FOLLOWS:

**SECTION 1.** FINDINGS. The City Council finds as follows:

- A. As detailed in the September 8, 2009 staff report to the City Council, a copy of which is on file in the City Clerk's Office and incorporated into this Interim Ordinance as if fully set forth herein, the City of Arroyo Grande ("City") is dealing with a critical water shortage while simultaneously pursuing a statutorily required update of the Housing Element and Conservation Element of the City's General Plan. During preparation of the City's 2001 General Plan and 2005 Urban Water Master Plan, the lack of water resources was identified as a significant issue. Since that time the City has conducted studies and made extensive efforts to develop a strategy to address the lack of water resources, including studying and prioritizing alternatives and options for short-term and long-term options and supplemental water supplies.
- B. After it was determined in 2008 that the City had utilized 99% of its water entitlements, the City Council approved Resolution No. 4118 on August 12, 2008 declaring the existence of a "severely restricted water supply condition" and implemented mandatory water conservation measures.
- C. Among the short-term measures that have been identified to increase water supplies are water conservation public education efforts and implementation and enforcement of water conservation regulations, a tiered water rate structure, installation of Well No. 10, and the City has contracted with the Oceano Community Services District for delivery of water. Long-term measures that have been identified include a comprehensive groundwater study, the Nacimiento Lake water project, a desalination project study, State water, and study of two (2) recycled water projects, the first in cooperation with the South San Luis Obispo County Sanitation District and the second a joint project with the City of Pismo Beach. In addition, the City has been participating in a study of raising the height of the spillway of the Lopez dam to increase the capacity of Lopez Lake.
- D. Based upon preliminary data resulting from a groundwater monitoring program implemented in early 2009 by a group of cities that include the Cities of Arroyo Grande, Grover Beach, Pismo Beach and the Oceano Community Services District, groundwater levels and water quality sampling have shown early signs of seawater

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intrusion in the part of the basin from which the City obtains the majority of its groundwater supply.

Seawater intrusion can be a serious threat. Seawater is highly saline (with typical chloride concentrations of 19,000 mg/L) and mixing even a small amount, as little as two percent, with fresh groundwater is enough to make water undrinkable. Once seawater has intruded and mixed in a groundwater basin, it is very difficult and costly to remove.

While this is preliminary data, and additional evaluation and recommendations from consultants are expected, this new information combined with the severely restricted water supply conditions and related concerns discussed above, create an immediate need to study and understand it's implications in relation to the City's General Plan update and other development proposals, policies and programs.

- E. The Community Development Department of the City of Arroyo Grande recently initiated the process of updating the City's General Plan, with immediate emphasis on the Housing Element and the Conservation Element; as the Conservation Element provides for the conservation, development and integration of natural resources, this process will enable the City to immediately address the impacts of the water shortage and implications of the seawater intrusion problem on development in the City, including the issue of insufficient water supply in relation to the City's Housing Element, regional housing needs allocation and its affordable housing needs and requirements.
- F. Due to the foregoing, the City intends to immediately begin a study of issues related to future development and insufficient water supply. In the meantime, if a temporary moratorium on Development Projects is not immediately imposed pursuant to the provisions of Government Code §65858, such unplanned development would defeat the intent and purpose of the City's General Plan policy of providing for orderly development with sufficient water resources and undermine the update of the City's Housing Element and Conservation Element.

# **SECTION 2. ESTABLISHMENT OF MORATORIUM**

The City Council hereby declares that a temporary moratorium on the approval of Development Projects, as defined below ("Development Projects") is necessary in order to permit the City the time to conduct research and consider appropriate regulations, amendments and/or clarifications to protect the public health, safety, welfare and the economic prosperity of the community. As used herein, "Development Project" means any project undertaken for the purpose of development and includes, but is not limited to any project involving the issuance of a permit for construction or reconstruction. Development Project includes ministerial projects, unless the project does not require a new water connection.

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- **SECTION 3.** Except as otherwise specified herein, while this Interim Ordinance remains in effect, no permit, or other applicable entitlement, which entails in whole or in part the approval of any new Development Project within the City shall be approved or issued.
- **SECTION 4**. Pursuant to the provisions of California Government Code §65858, this Interim Ordinance is adopted as an Interim urgency zoning ordinance and shall take effect immediately. The facts demonstrating the urgency that form the basis for this Interim Ordinance are set forth in Section 1, above and in addition are as follows:
- A. The City has and continues to receive applications for Development Projects and expects to continue to receive such application.
- В. The approval of new Development Projects within the City of Arroyo Grande without an opportunity to study the implications of the current water shortage and seawater intrusion in the Arroyo Grande Groundwater Basin in relation to the City's pending update of certain Elements of the General Plan, regional housing needs allocation, affordable housing needs, pending recreation and other public facility projects, and economic development efforts would result in a threat to orderly Approval of such projects may conflict with development in a fundamental manner. Policy LU11-3.1 of the City's Fringe and Urban Area Land Use Element, which limits the "number of dwelling units within the City to that which is consistent with the long-term availability of resources needed to support area population and that which public services and facilities can adequately support." And Policy COS6 of the City's Conservation Element which states that "The City of Arroyo Grande shall manage land use and limit its urban development potential to that which can be sustained by the available water resources..." It is thus necessary to establish a temporary moratorium to allow for: (1) research and study to determine how to address these issues, the type of regulation that may be imposed with regard to new connections to the City's water system and how that relates to General Plan policies, regional housing needs allocation and affordable housing needs and related matters, (2) the preparation and presentation of any proposed ordinance, amendments or regulations to address this issue.
- C. It is necessary that this Interim Ordinance go into effect immediately in order to maintain the City's environment pending the outcome of the above-referenced research, study and analysis, which will dictate the need to establish new policies, procedures and otherwise regulate Development Projects in the City in relation to the water supply problem.
- D. It is necessary that this Interim Ordinance go into effect immediately so that the City may study the manner in which to comprehensively prioritize needs and balance resources including those pertaining to the provision of affordable housing and state mandated regional housing stock and short and long term water availability.

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- E. It is necessary that this Interim Ordinance remain in effect until the required research, study, and analysis have been completed and the recommendations of Community Development Department staff and the Planning Commission can be received and considered by the City Council and the City Council, in turn, can consider amendment of the City's General Plan and Development Code.
- **SECTION 5.** The City Council therefore finds that, based upon the foregoing, there is a current and immediate threat to the public health, safety and welfare, and that the approval of additional Development Projects through the issuance of approvals or permits would result in a threat to, the public health, safety and welfare.
- **SECTION 6.** Any Development Project currently being processed by the City and for which the City has accepted or deemed an application as complete prior to the effective date hereof, and any City initiated public safety project, shall be exempt from the provisions of this Interim Ordinance.
- **SECTION 7**. Pursuant to Government Code §36937(b), this Interim Ordinance shall take effect immediately upon its passage and adoption.
- **SECTION 8.** Pursuant to Government Code §65858, this Interim Ordinance shall expire 45 days following the date of its passage and adoption, unless its term is extended by action of the City Council in accordance with the procedures set forth in §65858, or at such earlier time as the City Council acts to repeal this Interim Ordinance.
- **SECTION 9.** In accordance with the requirement of Government Code §65858, at least ten days prior to the expiration period provided for in Section 8, the City Council shall issue a written report describing any measures taken to alleviate those conditions herein referenced which led to the adoption of this Interim Ordinance.
- **SECTION 10.** A comprehensive summary of this Interim Ordinance thereof shall be published once in a newspaper of general circulation in the City of Arroyo Grande within 15 days after its adoption.
- **SECTION 11.** The adoption of this Interim Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to §§1506l(b)(3)and 15306 of the State CEQA Guidelines because it can be seen with certainty that there is no possibility that such adoption may have a significant effect on the environment. In addition, the adoption of this Interim Ordinance is exempt from CEQA pursuant to §15262 of the CEQA Guidelines in that this Interim Ordinance involves only feasibility or planning studies for possible future actions by the City.
- **SECTION 12.** This Interim Ordinance shall be liberally construed to accomplish its intended purposes. Nothing contained in this Interim Ordinance is intended to limit the continuation of lawful nonconforming uses or structures.

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<b>SECTION 13.</b> The City Council hereby declares that should any section, paragraph, sentence, phrase, term, or word of this Interim Ordinance hereby adopted be declared for any reason to be invalid, it is the intent of the City Council that it would have adopted all other portions of this Interim Ordinance irrespective of any such portion declared invalid.
On motion by Council Member, seconded by Council Member, and by the following roll call vote, to wit:
AYES: NOES: ABSENT:
the foregoing Interim Urgency Ordinance was adopted this 10 <sup>th</sup> day of November 2009.

TONY FERRARA, MAYOR
ATTEST:
KELLY WETMORE, CITY CLERK
APPROVED AS TO CONTENT:
STEVE ADAMS, CITY MANAGER
APPROVED AS TO FORM:
TIMOTHY J. CARMEL, CITY ATTORNEY

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