



scwd² Desalination Program Environmental Review Process

Presented by:

**Heidi Luckenbach, City of Santa Cruz
Stephanie Strelow, Strelow Consulting**



Presentation Outline

- What are CEQA/NEPA
 - Origins
 - Purpose
 - Process

- Water Supply Planning/Environmental Review Efforts
 - City of Santa Cruz
 - Soquel Creek Water District

- How/When to get involved

CEQA/NEPA

- ◆ CEQA: California Environmental Quality Act, Enacted 1970
- ◆ NEPA: National Environmental Policy Act, Enacted 1969
- ◆ CEQA is triggered when the Project is:
 - Undertaken by a public agency
 - Supported by grants, loans or other assistance by a public agency
 - Requires issuance of a permit by a public agency
- ◆ NEPA is triggered when the Project is:
 - Jointly carried out with a federal agency
 - Requires a federal permit
 - Obtains/requires federal funding
 - Occurs on federal land

Purpose of CEQA

- ◆ Inform agency, decision-makers and the public of potential significant project environmental effects.
- ◆ Identify ways to avoid or significantly reduce impacts.
- ◆ Prevent significant impacts by requiring changes in projects through alternatives or mitigation measures.
- ◆ Disclose to the public the reasons why an agency approved the project if significant effects are involved.

“Significant effect on the environment”

a substantial, or potentially substantial, adverse change in physical conditions within the project area

Purpose of NEPA

- ◆ To declare a national policy which will encourage productive and enjoyable harmony between people and their environment;
- ◆ To promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man;
- ◆ To enrich the understanding of the ecological systems and natural resources important to the Nation; and
- ◆ To establish a Council on Environmental Quality.

CEQA (EIR) Process

- ◆ EIR Notice of Preparation
 - Identifies Issues to be analyzed in EIR
- ◆ Public & Agency Scoping Meetings
- ◆ Draft EIR circulated for Public Review
- ◆ DEIR Public Comment Meeting
- ◆ Final EIR & Mitigation Monitoring Program
- ◆ EIR Certification & Agency Decision
 - CEQA Findings
 - Statement of Overriding Considerations, if needed

NEPA Process

- ◆ Identify Federally Involved Agencies
- ◆ Consult with Federal Agencies
- ◆ Determine NEPA Document – EA or EIS – depending on federal action
- ◆ Consider Preparation of Joint CEQA-NEPA Document
- ◆ Public Review
- ◆ Agency Decision
- ◆ Record of Decision

Water Supply Planning/Environmental Review Efforts

- ◆ **Pre-1997** Water supply planning focused on water supply.
- ◆ **1997** City's IWP process responded to drought-related crisis by considering combinations of water conservation, use curtailment during droughts, new water supply.
- ◆ **1999** District adopted a Draft Integrated Resources Plan (IRP) with a Public Advisory Committee
- ◆ **2005** City Certified IWP program-level EIR
- ◆ **2006** District adopted 2006 IRP
- ◆ **2006 – Present** Implementation of Conservation Plan
- ◆ **Present** Implementation of Curtailment Plan
- ◆ **2008 – Present** Pilot SWRO Plant, Intake & Discharge Systems, Energy Minimization and Greenhouse Gas Reduction Study

Soquel Creek Water District Integrated Resources Plan

2006 IRP Preferred Alternative includes the following components:

- ◆ Continued **groundwater monitoring** and **redistribution of pumping** as possible to alleviate the potential for saltwater intrusion.
- ◆ Continued implementation of existing and new **conservation** and drought management programs.
- ◆ Development of **site specific recycled water** supplies for irrigation use
- ◆ Support for groundwater **recharge** protection and enhancement projects/policies.
- ◆ Preparation of project-level **feasibility studies** for a modified Soquel Creek Diversion project and/or local only-desal as alternatives or in addition to the regional desalination project with the City.
- ◆ Develop **seawater desalination** with the City of Santa Cruz.

City of Santa Cruz IWP Alternatives

- ◆ Conservation: 14 Recommended Programs for 5% savings
- ◆ Curtailment: Evaluated different levels (10% - 60% water shortage) of peak-season water supply curtailment and the affects on different groups of customers.
 - 25% was highest level tolerable for Santa Cruz.
- ◆ Water Supply:
 - Seawater RO
 - Reclamation/Coast Groundwater Exchange
 - Santa Margarita Aquifer
- ◆ **IWP RECOMMENDATION**
 - Conservation – (300 million gallons per year)
 - Curtailment – 15%
 - Desalination for drought shortages, City or Regional Project

IWP Program EIR

Prepared for a program or series of actions that are:

- ◆ *Related geographically*
- ◆ *Logical parts of a chain of contemplated actions*
- ◆ *Connected as part of a continuing program*
- ◆ *Carried out under same authorizing statute or regulatory authority and have similar environmental impacts that can be mitigated in similar ways*

(CEQA Guidelines Sec. 15168)

- ◆ Allow the Santa Cruz City Council to determine whether or not to approve the recommended IWP as the City's future water supply plan, and identify which of the two water supply alternatives (city only or regional seawater RO) is the environmentally superior program.
- ◆ Used to determine which plant location and pipeline routes are environmentally superior.

IWP EIR Review of Desalination

💧 Program

- Conservation
- 15% Curtailment During Droughts
- Additional Water Source: 2.5 million gallons per day (mgd) desalination. City only or regional project.

💧 Desalination Facility Concept

- Seawater intake system using an abandoned wastewater outfall
- Construction of a new desalination plant
- Pipelines and pump stations to deliver treated water to the Bay Street Reservoir and convey seawater concentrate to the City's wastewater facilities for blending and ocean disposal

💧 Location: Site along Delaware Avenue corridor

Project Environmental Review

- ◆ Project EIR:
 - Assess site-specific impacts of a desalination plant design, operation & pipeline installation
 - Re-evaluate and update pertinent information
- ◆ Review technical studies and Prepare Alternatives Analysis
 - Pilot SWRO Facility, WSS, Energy Plan, Intake Studies, Evaluation of Brine Discharge
- ◆ Prepare EIR Project Description
- ◆ Prepare EIR with supplemental field surveys & technical studies as needed

Public Involvement

- ◆ Informational Meetings: Public has opportunity to ask questions and provide their input.
- ◆ Periodic Email Updates, Website, and Newsletters.
- ◆ EIR Scoping Meetings: Public provides comments (i.e., what should be studied, other comments). Response is formal.
- ◆ Review and provide Comment on Draft EIR
- ◆ EIR and Project Public Hearings – City Council & SqCWD Board

Environmental Review Process

Inform
Winter/Spring 2010

**Project Description/
Notice of Preparation**

**Informational
Meetings**

Provide Input
Spring/Summer 2010

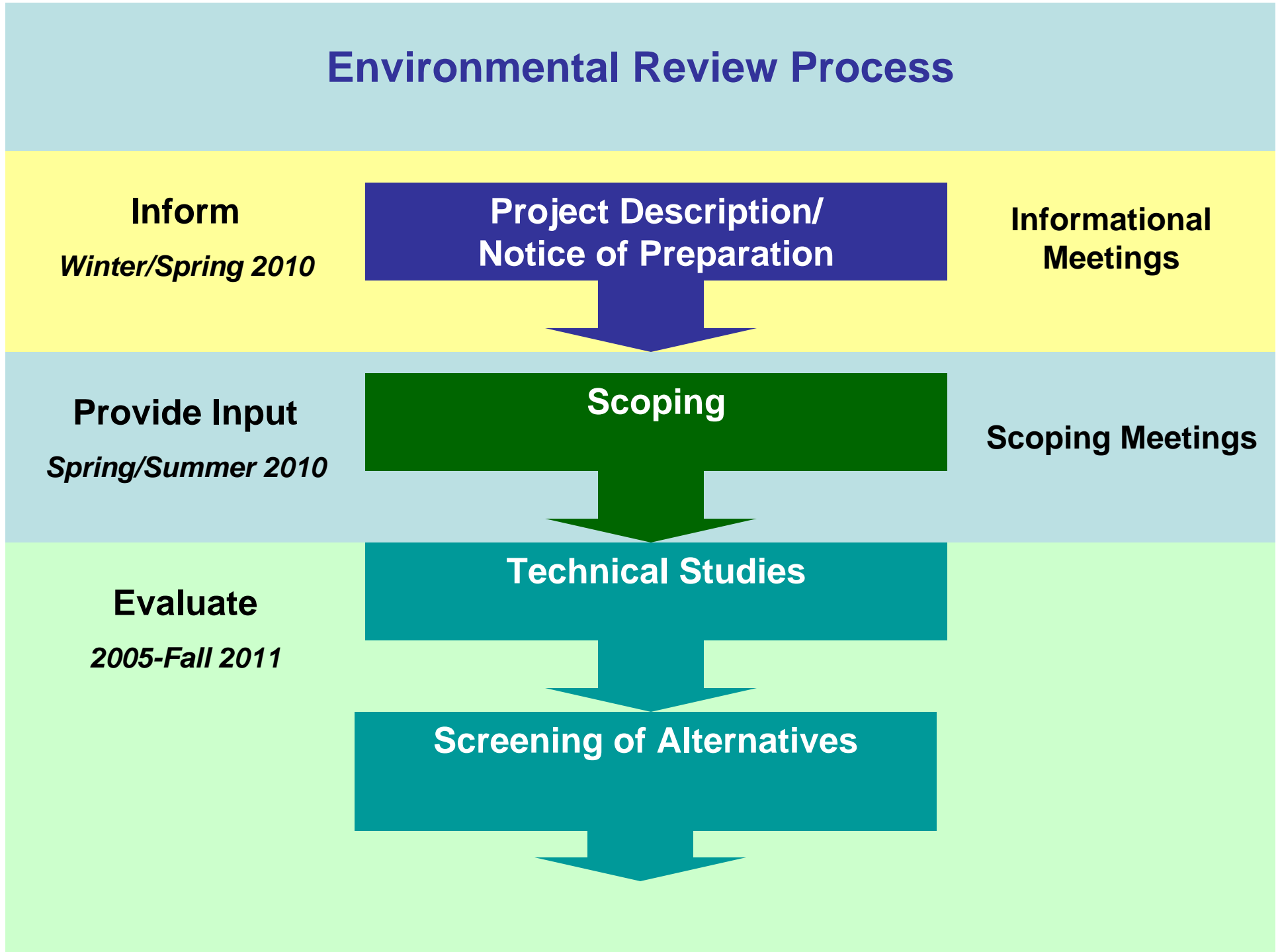
Scoping

Scoping Meetings

Evaluate
2005-Fall 2011

Technical Studies

Screening of Alternatives



Environmental Review Process (continued)

Evaluate
(cont.)

2005-Fall 2011

Prepare draft EIR
Identify Preferred Alternatives

**Circulate Draft EIR/EIS for
Public Review and Comment**

**Public Comment
Meetings**

Respond

*Winter –Summer
2012*

Respond to Comments

**Finalize EIR/EIS and Mitigation
Monitoring Program**

Consider

Fall 2012

**Certify EIR, Decision on Project/
No Project, & Notice of
Determination**

Public Hearing



Program Contact:

Heidi Luckenbach, P.E.
Desalination Program Coordinator
831.420.5214
SWRO@ci.santa-cruz.ca.us

Program Website:

www.scwd2desal.org

