

# CITY OF MORRO BAY WATER RECLAMATION FACILITY PROJECT



## PROJECT GOALS

### ADVANCED WATER TREATMENT

#### PRODUCE TERTIARY DISINFECTED WATER

This is one of the highest levels of treatment defined by the state of California and includes filtration and disinfection steps far beyond our existing WWTP. The safe, clean water produced by this process is used across the state to irrigate landscaping and food crops. It can be further treated to directly recharge the groundwater aquifers from which we draw our drinking water.

### COST EFFECTIVE REUSE

#### PRODUCE RECLAIMED WASTEWATER IN A COST EFFECTIVE MANNER

This is actually two goals in one. The first is to control costs to keep our water and sewer rates as low as possible. The second is to reclaim the nearly million gallons of water a day the facility will produce and reuse it to make our city water supply sustainable.

### ONSITE COMPOSTING

#### ALLOW FOR ONSITE COMPOSTING

Composting is a process that decomposes the organic portion of the residual solids after water is removed from wastewater, resulting in a harmless biosolid that can be used for mulch and fertilizer.

### ENERGY RECOVERY

#### DESIGN FOR ENERGY RECOVERY

This goal envisions a renewable energy component of the project that produces much of the electricity required to operate the WRF.



SPRING 2016  
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## IMPROVE. ENHANCE. RECLAIM.



### A MESSAGE FROM YOUR CITY MANAGER

Among other important objectives, the community-developed goals for the project are to build a cost-effective facility that reclaims those million gallons of wasted water to help supplement our city water supply.

From planning done to date we know that the new WRF will use very new technology such as a membrane bioreactor process. As with many WRFs around California that use this technology, ours will be completely enclosed – indoors – in a way that makes the facility virtually odor and noise free and will be designed to be compatible with the area around it.

Over the past three years the city evaluated 17 different possible sites. Those were narrowed down to four top alternatives. Further studies narrowed the four down to two sites, both in the Morro Valley. Many members of the community and a very active citizens advisory body have been very involved in this process. The City was leaning toward

the Rancho Colina Site but recently placed renewed focus on the Right-ti site, both of which have been our top two alternatives for over a year.

The City council recently directed staff to take a 60-day pause to conduct additional community outreach, and to review our two primary sites, re-examine two sites previously rejected, and identify if any new sites in the Morro Valley may be available.

We look forward to further public input and education. **Join us at one of two community-wide Q&As on April 7th and 10th, and visit our booth at the farmer's market on April 9th and 14th.** Staff will provide the Council an update at the April 12th council meeting, and again on May 10th. Whether your top priority is neighborhood compatibility, controlling costs, water reuse or another goal – your input is important.

Thank you,

**David Buckingham**

City Manager CITY OF MORRO BAY

The City has been working to replace our aging wastewater treatment facility (WWTP) for 10 years. We are now at a critical point and need your input.

Our existing WWTP is 62-years old, relies on open-air sludge beds and processors, sits on 26 prime ocean-front acres between our High School and park, and dumps 1 million gallons of treated water into the ocean every day.

Since January 2013 when the California Coastal Commission denied a permit to rebuild the plant on the current site, the City – residents, Council and staff - have worked long and hard to determine the best location for a new Water Reclamation Facility.(WRF)

*See inside to learn more...*

# PROJECT GOALS

## EMERGING CONTAMINANTS

### TREAT FOR CONTAMINANTS OF EMERGING CONCERN IN THE FUTURE

This goal is to design and build a WRF that is positioned to remove contaminants that have previously not been a concern in wastewater treatment. For example, many new pharmaceuticals are not removed in traditional wastewater treatment processes, may contaminate our groundwater, and may be regulated in the future.

## OTHER MUNICIPAL USES

### ALLOW FOR OTHER MUNICIPAL USES

The City's corporation yard, the fairly small facility where our 15 City maintenance workers start their day before heading out to work on projects around the city is co-located with the existing WWTP. To redevelop the 26-acre site on the oceanfront, the City will need to relocate the Corp Yard and it would be beneficial to co-locate the Corp Yard with the new WRF.

## NEIGHBORHOOD COMPATIBILITY

### COMPATIBILITY WITH NEIGHBORING USES

This critical goal requires that the Morro Bay WRF is compatible with its neighbors. Since the WRF will be completely contained inside a few buildings, many of the traditional compatibility concerns such as odor and noise are significantly mitigated. Another facet of this goal is that the WRF buildings be designed, perhaps in a ranch theme, to fit into the neighborhood.

## 5 - YEAR DEADLINE

### OPERATIONAL WITHIN FIVE YEARS

Our initial goal was to have the new facility treating wastewater by February 2021. The recent pause will likely delay that date to summer 2021. Our permit to discharge treated water from our existing WWTP will likely expire in 2021 so keeping the project moving forward is very important.

## SITE DEVELOPMENT

- Q:**
1. Why are we focusing on sites in the Morro Valley and not elsewhere?
  2. Where on any site would a WRF likely be located?
  3. How much area would a WRF require?
  4. How much grading is required? Would required grading create slope stability issues?
  5. What would happen to the remainder of any site not developed for a WRF?
  6. Is a new corporation yard a project requirement? What are the impacts of a corporation yard, if it were built?

- A:**
1. The Morro Valley is least costly since it presents the best opportunities for water reuse and is close to the City wastewater system.
  2. On a flat, low area that minimizes off-site visibility
  3. A new WRF would likely require 8 to 10 acres.
  4. A flat, less visible site would require very little earthwork, and any grading will be performed to eliminate slope stability issues.
  5. Any development other than a WRF and related landscaping/screening would require a separate public review process.
  6. A corporation yard is not part of the WRF project, but is a City need identified since 2008 and must be constructed somewhere. A corp yard is the base for ~ 15 City employees working around the city from 7:30 AM to 4:30 PM and has minimal impacts related to traffic or noise.

## COSTS & PROPERTY VALUES

- Q:**
1. How important are project costs to the community? How does that relate to developing a WRF in the Morro Valley?
  2. How much will the WRF cost? How will this affect the rates I pay?
  3. How much will it cost to acquire the property?
  4. Why has the City already put money down on a site in advance of a purchase?
  5. How will the project affect my property values?

- A:**
1. Project cost has consistently been identified in workshops since 2013 as a critical community-wide concern. Morro Valley is the least expensive area for a WRF due to proximity to water reuse opportunities and the wastewater system.
  2. WRF cost is being determined through the Facility Master Plan. Cost for water reuse is being determined through the Master Reclamation Plan. The City passed a rate increase last year for the first phase of the WRF.
  3. Property cost will be determined by an appraiser. Public agencies cannot pay more than the appraised cost for the property.
  4. Purchasing an option to buy a property is a common way for public agencies to take property off the market while they study it.
  5. If the WRF does not cause visual, odor, or traffic impacts to residences, it is not likely to affect property values. Project design that addresses these issues will be crucial to successfully address this key concern for those who live closest to any given site.

## VISUAL

- Q:**
1. How close are the nearest homes to where the WRF would be built?
  2. How many homes can see the likely location of the new facility?
  3. How visible is the WRF site from public roadways?
  4. How tall will the buildings on the WRF site be? How will they be screened?
  5. Will the WRF be lighted at night?

- A:**
1. This varies, depending on the site. For example, the Rancho Colina site is within 500 feet of 46 dwellings and 1,000 feet of 29 additional homes. At the Righetti site, no homes are within 500 feet. 35 homes are within 1,000 feet.
  2. This varies. Fewer than 10 homes can see the develop-able portion of either the Righetti or Rancho Colina site. A portion of a nearby trailer park can see the Rancho Colina site.
  3. A potential WRF location is visible along 1,000 feet of Highway 41 at the Righetti site and 3,800 feet at the Rancho Colina site. Topography and landscaping partially block views along the highway at both sites.
  4. The building heights will be similar to barns or ranch facilities (single story up to 15 or 18 feet).
  5. WRF lighting at night will be minimal and will be directed downward for safe access between buildings. All plant operation will take place inside buildings.

## ODORS

- Q:**
1. How will odors be controlled on the site?
  2. Will odor control measures be eliminated if they are too costly?

- A:**
1. All facilities will be contained. Gases will be collected and treated to remove odors.
  2. Odor control is a City goal, is a minor cost to the project, and is necessary to be a good neighbor at any site.

## TRAFFIC

- Q:**
1. How much traffic will the WRF generate? How does this compare to current traffic levels?
  2. How will the WRF site be accessed?

- A:**
1. The WRF will generate approximately 50 to 60 vehicle trips, less than 1% of the average daily traffic at Highway 41 (7,000 to 8,000 trips/day).
  2. The WRF site will be accessed from Highway 41, not from adjacent neighborhoods.

## NOISE

- Q:**
1. How noisy is a WRF?
  2. How does this compare to existing noise sources in the area?

- A:**
1. A WRF will include soundproof enclosures around equipment and will generate less noise at property lines than a residence.
  2. Noise generated from the WRF will not be noticeable to any nearby residences, especially in the context of existing highway noise.

Previously Studied Sites 2011-2013

Primary Morro Valley Sites Selected in 2014

## SITES CURRENTLY CONSIDERED FOR FURTHER ANALYSIS

### 1 RANCHO COLINA SITE

- 8 acres near Highway 41
- Rolling topography; visually prominent from the highway
- Likely slightly more expensive than the Righetti
- 75 homes within 1,000 feet
- Close to water reclamation opportunities

### 2 RIGHETTI PROPERTY

- 10-15 acres of low ground near Highway 41
- 3,000 feet closer to the City's existing wastewater infrastructure than Rancho Colina
- Primary alternative to Rancho Colina since 2014
- Likely slightly less expensive than Rancho Colina
- 35 homes within 1,000 feet
- Close to water reclamation and wastewater infrastructure

### 3 TRI-W SITE

- Two properties totaling 556 acres; partly in City, partly in County
- Most suitable location is 10-15 acres in the County
- One of the top four sites in 2014 study
- Likely 10-15% more expensive than the sites in the Morro Valley
- No homes are located within 1,000 feet of the best part of site
- Other parts of Tri-W are near homes and/or planned commercial
- Property not previously available; portions may be constrained by a voter initiative

### 4 CHEVRON / TORO CREEK SITE

- In Toro Creek valley; site to be determined, about 3 miles north of Morro Bay
- One of the top seven sites in 2013 Options Report
- Likely 10-15% more expensive than the Morro Valley sites
- Far from Morro Bay homes and businesses
- Located 3+ miles from water reclamation opportunities would benefit City water supply

### 5 ADDITIONAL MORRO VALLEY SITES

- Investigating other sites in Morro Valley
- Close to water reclamation opportunities

## PROJECT TIMELINE

2007-2013 WWTP UPGRADE AT EXISTING SITE

2013-2017 PHASE 1 WRF PLANNING\*

2017-2019 PHASE 1 WRF DESIGN

2019-2021 PHASE 1 WRF CONSTRUCTION

MID 2016-MID 2025

PHASE 2 RECYCLED WATER SYSTEM

PLANNING, DESIGN & CONSTRUCTION

2025  
PROJECT COMPLETE  
MID-2025



CITY OF MORRO BAY  
**WATER FACILITY**  MORRO BAY  
**RECLAMATION PROJECT**

**GET INVOLVED** **UPCOMING EVENTS**



**MORRO BAY FARMERS' & COMMUNITY MARKET**  
 800 Block of Main Street  
**Saturday, April 9th**  
 2:00pm-5:00pm

**MORRO BAY FARMERS' MARKET**  
 Spencer's Fresh Market Parking Lot  
**Thursday, April 14th**  
 2:30pm - 5:00pm



**VETERAN'S MEMORIAL HALL**  
 209 Surf Street, Morro Bay

**Thursday, April 7th**  
 6:00 pm - 8:00 pm

**Sunday, April 10th**  
 4:00pm - 6:00 pm

**PHASE 1 TASKS ACCOMPLISHED**

- Siting Studies, 17 locations
- Narrowed potential sites to 7 locations
- Regional WRF at CMC Evaluation
- Initial groundwater evaluation of Morro Valley and Chorro Valley
- Further analyses at Righetti and Rancho Colina sites
- Selection of Morro Valley Site
- Facility Master Plan & Program Management teams hired
- CEQA team hired

- Treatment processes selected
- Recycled Water Planning Grant awarded
- MOU signed with Righetti property owner
- 25 WRFCAC Meetings
- 6 Community Workshops
- Wastewater collection system salinity study
- Flow monitoring and water quality analyses
- CA State Revolving Fund (SRF) Loan application submitted

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