



### Recycled Water Supply Options

UTILITIES & ENVIRONMENTAL SERVICES

Jan Lee Water Resources Manager

November 13, 2017

### Overview

- Sustainable and drought-proof water supply
- Phase I supply for irrigation uses
- 290 acre-feet per year (~260,000 GPD)
- Facilities
  - 1 million gallon tank
  - Pump station
  - Up to 10 miles of pipelines



## Recycled Water Supply Options



- A. Purchase of recycled water from Russell City Energy Center (RCEC)
- B. Construction of new City-owned recycled water treatment facility

### RCEC Supply Option A



- Supply: Up to 0.5 million gallons per day (mgd)
- Quality: Title 22 disinfected tertiary treated water
- Cost: Incremental cost to produce recycled water
- Recirculated water: Provisions to allow RCEC to return non-compliant water to WPCF
- Term: Two years, provisions for renewals
- Approvals: Each party responsible for obtaining necessary permits



### RCEC Supply Option A cont.



- Current status
  - Effort to execute agreement by December 2017
  - City permitting process almost complete
  - RCEC yet to initiate permitting process
- Schedule concerns
- Preferred supply option

### City Supply Option B



- Package membrane treatment system
  - Highly reliable
  - Expandable
  - Installation time
- Title 22 tertiary treated recycled water
- 0.5 mgd capacity
- Within City's control to implement





### City Supply Option B cont.



- Current status
  - Prepared documents to pre-select membrane supplier
  - Issued Request for Proposals to design treatment system
  - Initiated revisions to permit application
- Committee input

### Proposed Approach



- Continue efforts to finalize agreement with RCEC
- Proceed with final design of package membrane treatment system, even if agreement with RCEC is executed
- Support RCEC permitting efforts
- Make final decision on supply option after completion of final design (fall 2018)

### Next Steps



- Obtain Committee input on supply options and proposed approach
- Complete final design of recycled water storage and distribution system

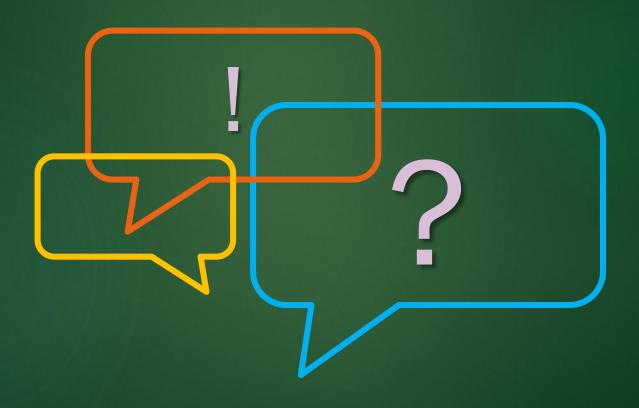






# Comments, Questions & Discussion









Construction, Repair, Reconstruction, Destruction or Abandonment of Wells:

Introduction of Ordinance Updating Section 5-4.10 of the Hayward Municipal Code

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Jan Lee Water Resources Manager

November 13, 2017

### Purpose of Well Standards



- Regulate construction, maintenance and abandonment of groundwater wells
- Prevent groundwater pollution and contamination
- Ensure health and safety of groundwater users



### Implementation of Well Standards



- Municipal Code Section 5-4.10 adopts Alameda County Well Standards Ordinance as the standards for Hayward
  - Revised by the County in April 2015 to comply with current
     State codes and enhance enforcement
  - Hayward adopted Revised Ordinance as part of comprehensive HMC update in June
- Implemented in Hayward by the Alameda County Public Works Agency

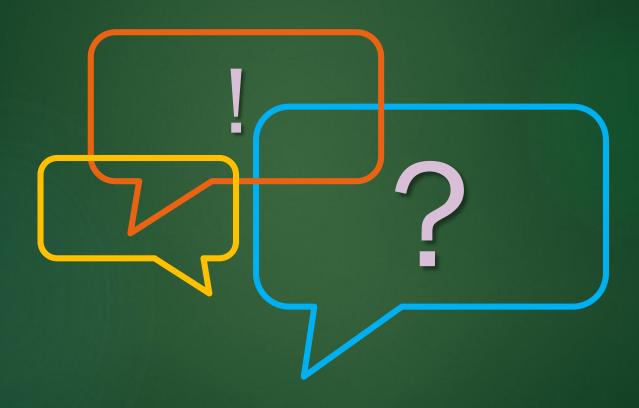
### Proposed Action



- Minor changes that do not change purpose or implementation of well standards
  - Deletes references to outdated documents
  - Ensures that future County revisions are enforceable in Hayward unless the City Council amends or rescinds the Well Standards Ordinance
- If Committee concurs, ordinance will be introduced at City Council

### Questions & Discussion









# East Bay Community Energy – Possible Purchase of Local Renewable Energy for City Facilities

**UTILITIES & ENVIRONMENTAL SERVICES** 

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November 13, 2017

### East Bay Community Energy



- ▶ JPA established in late 2016
- EBCE Board meeting regularly since January 2017
- Goals include:
  - Rates competitive with PG&E
  - Electricity with lower GHG intensity
  - Develop new renewable energy facilities in Alameda County



### East Bay Community Energy



- EBCE will offer a default product and a 100% Renewable product
- Possible 3<sup>rd</sup> product: 100% Renewable and Local
  - For municipal accounts
  - Higher rate to support local projects

### EBCE – Local Projects



- Two potential utility-scale projects in Alameda County
  - Salka Energy is developing a 55MW wind project in the Altamont Pass
  - Clenera is developing a 20MW solar project in eastern Alameda County.





### EBCE Proposal

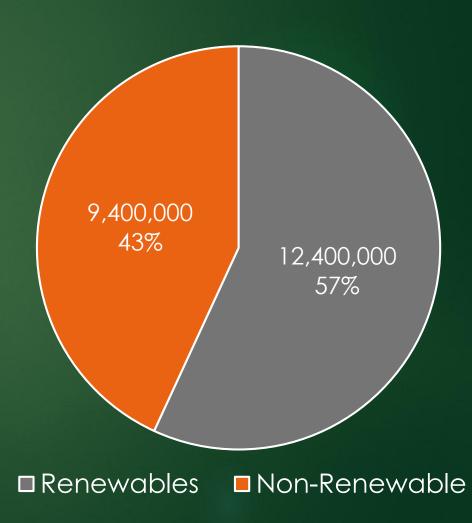


- EBCE CEO asking for 10 to 20 year commitments
- Rate premium may be 7% compared to PG&E
- CEO asking cities to enroll at least 10% of municipal load

### Hayward's Energy Use



- Use 21.8 million kWh/year
- Generate 12.4 million kWh
- Purchase 9.4 million kWh
- Electricity purchases are declining
- ► Goal is ZNE by 2025



### Fiscal Impact



- ▶ 10% of the electricity that Hayward currently purchases is approximately 940,000 kWh per year
- > \$220,000 = cost of 940,000 kWh

	2018	2019	2020	2021	
Premium %	7%	6%	5%	4%	
Premium \$	\$15,666	\$13,428	\$11,190	\$8,952	

### Questions & Discussion









## Proposed 2017 Agenda Planning Calendar

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### Suggested 2018 Agenda Topics



### January 2018

EBCE – Consideration of Renewable Content for Default Product (Action)

Addressing Litter from Disposable Food Packaging (Action)

EBEW Paper: Changing Landscape of Energy Efficiency Programs in East Bay" (Action)

#### Stormwater Fees (Action)

Lead Testing in Schools (Informational)

Review of Last Winter's Mountain Tunnel Shutdown (Informational)

WMAC Franchise Agreement Semi-Annual Report (Informational)

March 2018

Establishing 2025 and 2030 GHG Reduction Goals (Action)

Plastic Straws and Utensils (Action)

Progress Toward 2025 ZNE Goal (Informational)

CYES Annual Report (Informational)

Car Sharing (Informational)

### Suggested 2018 Agenda Topics



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AMI Implementation Update & Customer Portal (March?)

Green Infrastructure (May)

WMAC Franchise Agreement Annual Report (July)

Sustainable Groundwater Plan

Accelerating Multifamily Building Upgrades (CEC grant)

Stormwater Trash Reduction Requirements

Laundry to Landscape Ordinance

Tiny Homes

Bike Share Program

Electrify America's Investment Plan

Potential Assembly Bill to Ban Fossil Fuel Automobiles

Bulky Pickup Service & Illegal Dumping (What Works Cities)

Long Term Water Conservation Framework