TOWN OF WINDSOR

Draft Water Master Plan Update

Proposed CEQA Approach

November 18, 2009

RMC Innovative Solutions for Water and the Environment

Overview

- CEQA Process
- Service Area
- Previous (2000) Master Plan
- 2009 Draft Master Plan Update
- Draft Master Plan (Project) Definition
- Potential Alternatives under CEQA
- Proposed CEQA Approach
- Direction from Council on CEQA Approach

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CEQA Process

- Analyze the Environmental Consequences of the Draft Water Master Plan
- Consider those Consequences before approving the Final Water Master Plan

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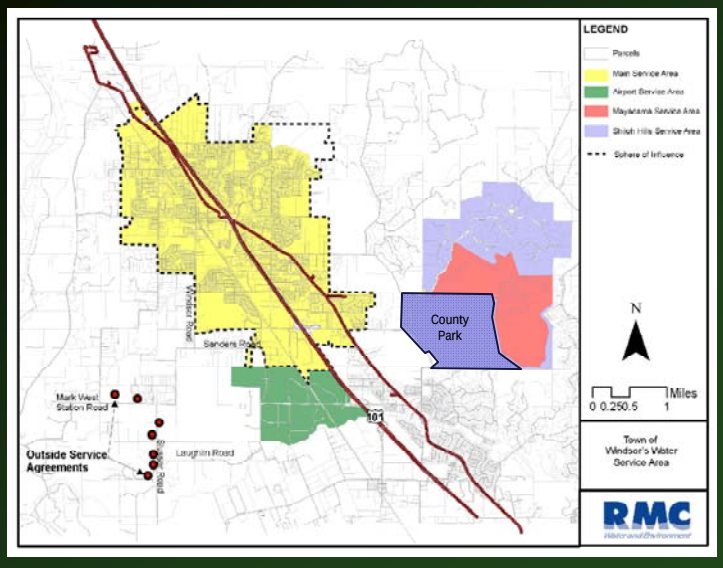
Town of Windsor Service Areas



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Previous Water Master Plan (Year 2000)

- Based on General Plan growth and buildout timing
- Water consumption at historical demand patterns (130 gpd per capita)
- Demands projected to be 16 mgd, maximum day
- Facilities projected to be needed:
  - Wells — River wells improved; no new off-river wells installed
  - Tanks — None implemented
  - Pipelines — Some improvements made

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Draft Water Master Plan Update 2009

- Not based on General Plan growth & buildout timing (slower growth and longer buildout)
- Consistent with current development patterns (compact development) and with General Plan land uses
- Conservation reflected in reduced demand (110 gpd per cap.)
- Resultant demands projected to be 12 mgd average day (vs. 16 mgd in 2000)
- Facilities projected to be needed:
  - Wells (off-river)
  - Tanks
  - Pipelines
  - Plus sustainable groundwater plan

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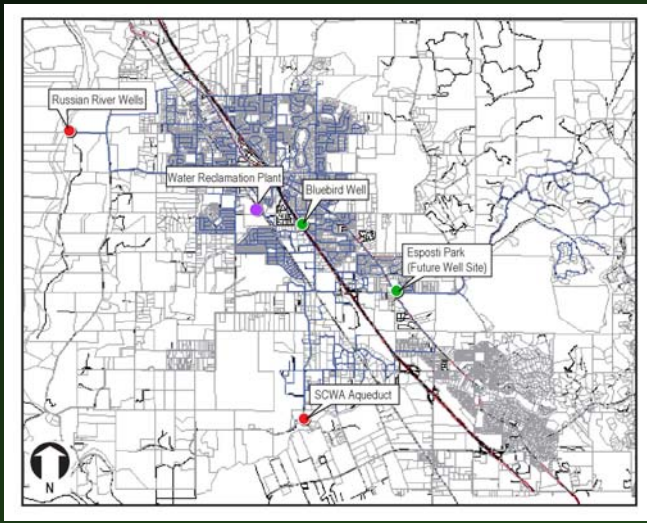
Current Sources Provide Some Diversity of Supply



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Draft Master Plan (Project) Definition

- Replace off-river wells for backup supply (Bluebird and Esposti)
- New wells for incremental supply (Hiram Lewis/Arata area)
- Sustainable Groundwater management
- Construct new water storage tanks
- Improve water mains to relieve current & future bottlenecks

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The Project Alternative Includes Diversity of Supply

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CEQA Alternatives Allow Analysis of Planning Assumptions

Proposed Project – densities at midpoint

1. Demand Management Alternative – densities at midpoint
2. Low Density Alternative – densities at low end
3. Compact Land Use Alternative – density at high end for multi-family housing; midpoint for others
4. No Project – density same as 2000 Master Plan Assumptions

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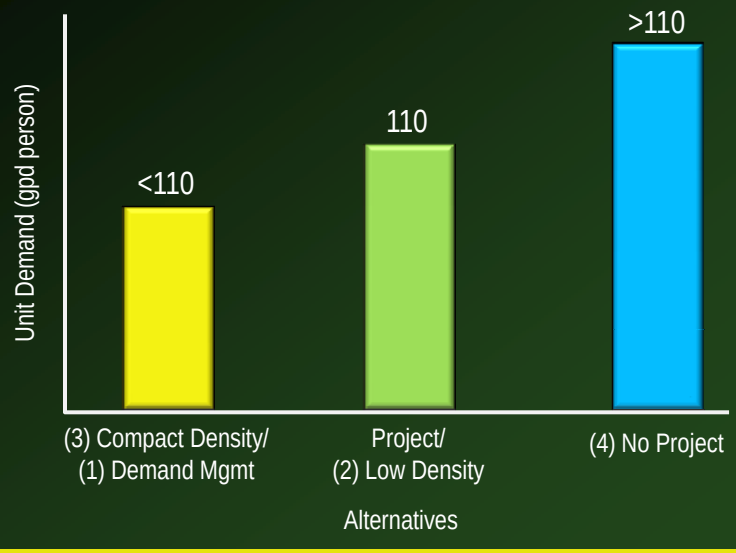
Per Capita (unit) water use varies across alternatives



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Facilities Across Alternatives Vary Slightly

Alternative	Water mains	Well replacement	Water storage tanks	New off-river wells
Project	Yes	Yes	Yes	Yes
1. Demand Management	Yes	Yes	**Yes, but smaller**	**Yes, but smaller**
2. Low Density	Yes	Yes	**Yes, but smaller**	**Maybe**
3. Compact Land Use	Yes	Yes	**Yes, but phased**	**Yes, but phased**
4. No Project	Yes*	Yes*	Yes*	**Yes, but no gw storage**
* Facilities as described in 2000 Water Master Plan and CEQA document				

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Sustainable Groundwater Management

Included in all alternatives ***except*** no project

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Proposed CEQA Approach

Prepare Programmatic EIR for Draft Water Master Plan Update 2009

- Identify Project Elements and Planning Assumptions (land uses, densities, etc.)
- Disclose range of impacts associated with project elements
- Analyze Well Defined Elements Common to all alternatives (storage tanks, water main and well upgrades) at a Project Level

Certify EIR and Approve Final Water Master Plan Update 2009

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Council Action

- Provide Direction to Public Works staff on implementing CEQA Approach

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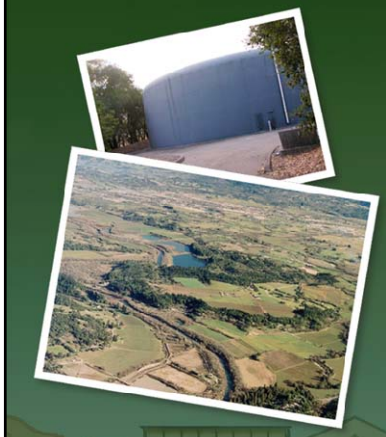

TOWN OF WINDSOR

RMC *Innovative Solutions for Water and the Environment*

Project Objectives

- Upgrade and maintain water distribution system that meets regulatory and Town-specified criteria for fire protection and delivery at safe and proper pressures
- Water system storage for normal and fire-flow conditions
- Water supply can meet demands reliably (with largest well/tank/pump out of service)
- Upgrade facilities to fix deficiencies in already developed areas
- Diversify water supplies to meet varied weather and regulatory conditions
- Meet current and future demands with less capital intensive facilities which can be phased in incrementally

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Project Objectives (cont.)

- Meet demands while sustaining surface water resources in the Russian River and groundwater resources in the local basin
- Maintain sustainable water supply system, upgraded with new facilities that minimize impacts to natural resources consistent with CA Global Warming Solutions Act of 2006 (AB 32)
- Provide orderly and efficient service within Urban Growth Boundary (UGB) based upon concurrency between development and availability of public services
- Provide for water service outside of the UGB consistent with existing agreements

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Some Improvements Needed Immediately for Existing Residents/Customers

- Off-river wells for backup and emergency
- Storage tanks for meeting peak demands

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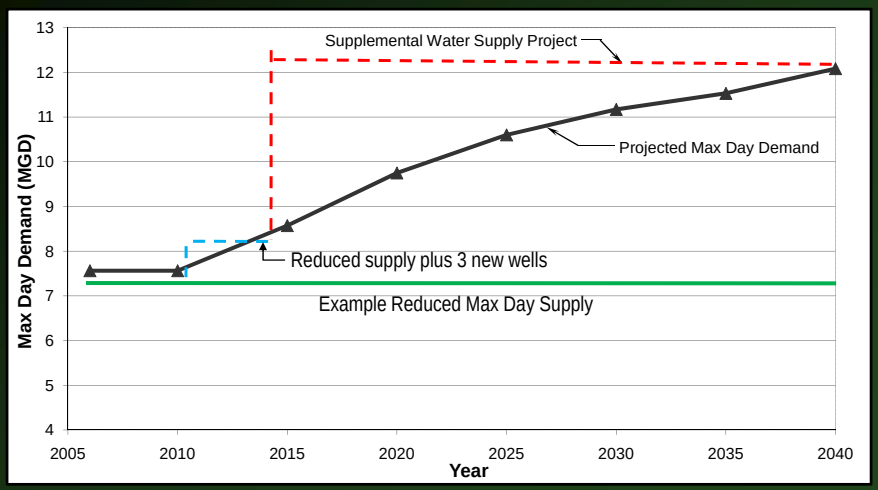
New Supplemental Water Supplies will be Needed Sooner to Meet Projected Demands if Reduced Supply Conditions Ordered by State persist



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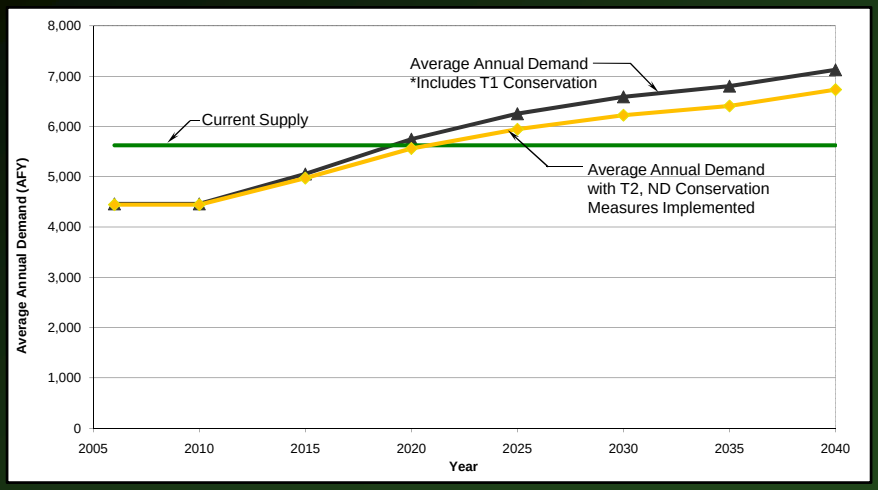
Average Annual Supply Estimates Can Be Extended with Conservation



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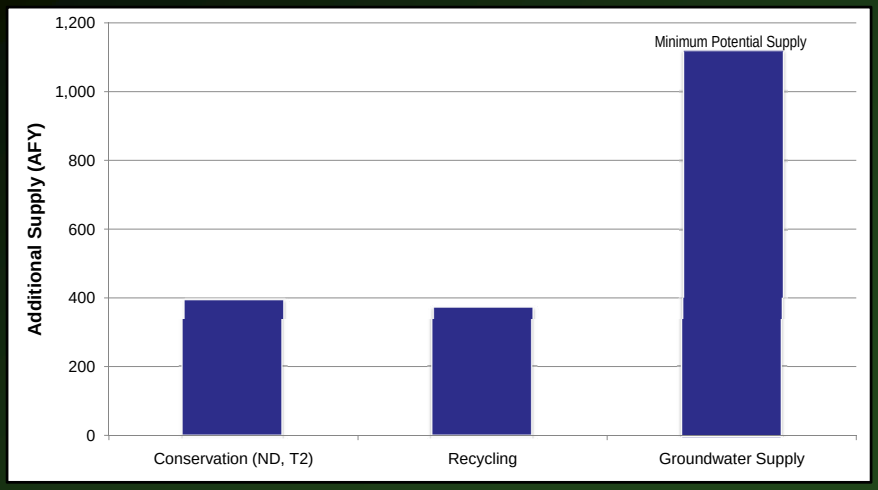
Sources of Additional Supply



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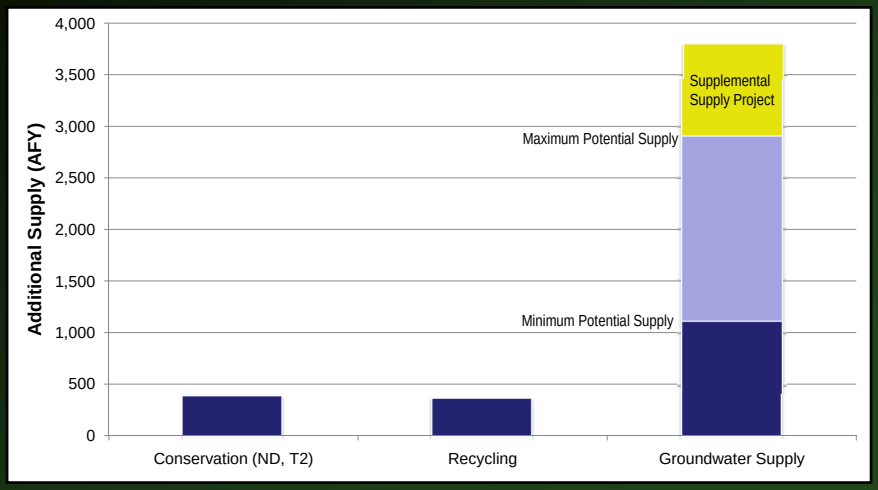

Estimated Costs of Project/Master Plan Update 2009

Project Type	Timeframe	Project Description	Estimated Budget ($M)
Water Supply Projects	2010 to 2015 and beyond	Replacement and New Wells; evaluation of groundwater storage and recharge	$16.3
Water Storage Projects	2010 to 2015 and 2020 to 2025	4.5 million gallons of water tank capacity	$7.9
Water Distribution Projects	2010 to 2035, phased	Water mains throughout distribution system, including interconnecting piping at wellfield and storage sites	$9.9
Total			**$34.1**

Allocation of Estimated Costs of Project/Master Plan Update 2009

Project Type	Timeframe	Project Description	Estimated Budget ($M)	Estimated Allocation ($M)
Water Supply Projects	2010 to 2015 and beyond	Replacement and New Wells; evaluation of groundwater storage and recharge	$16.3	Existing 8.3 Future 8.0
Water Storage Projects	2010 to 2015 and 2020 to 2025	4.5 million gallons of water tank capacity	$7.9	Existing 1.5 Future 6.4
Water Distribution Projects	2010 to 2035, phased	Water mains throughout distribution system, including interconnecting piping at wellfield and storage sites	$9.9	Existing 5.8* Future 8.0
Total			**$34.1**	**Existing 15.6** **Future 18.5**

** Only $2.2 million in current CIP Phase (2010-2015)*

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CIP Phasing Summary

Phase	Timeframe	Estimated Budget ($M)
Phase 1	2010 to 2015	$14.9
Phase 2	2015 to 2020	$12.5
Phase 3	2020 to 2025	$4.8
Phase 4	2025 to 2035	$2.0
Total		**$34.1**

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Short Term Recommendations (1-5 Years)

- Continue well exploration program.
- Install replacement wells (Bluebird & Esposti).
- Explore groundwater potential in North/Hiram Lewis Park area.
- Research water rights for storage of winter flows.
- Evaluate more aggressive water conservation program.
- Evaluate urban recycled water program expansion.

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Long Term Recommendations (6-10 Years)

- Develop third well field (North/Hiram Lewis area).
- Develop local managed groundwater storage program.
- Participate in regional groundwater storage program.
- Implement expanded conservation program.
- Implement expanded urban recycled water program.

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