



FEBRUARY 20, 2007

SALT LAKE COUNTY



**SALT LAKE
COUNTY**



Water Quality Stewardship Plan Wastewater Element

Project Synopsis

Core Council Meeting

BROWN AND CALDWELL

WaQSP

(Wastewater Element)

Explanation:

Wastewater planning element to identify critical planning elements for future wastewater treatment and water reclamation facilities to achieve the goals and objectives of the Water Quality Stewardship Plan and the Statutory Requirements of Section 208 of the Clean Water Act.

Phase 1

(Aug. 2006 – Dec. 2006)

Task 1: Project Initiation and Understanding

Task 2: Wastewater Treatment Technology Trends

Task 3: Wastewater Planning Framework

Task 4: Reports and Meetings

- **Stakeholder Workshop 1** (11/29/06)
- **Stakeholder Workshop 2** (12/18/06)

Phase 2

(Jan. 2007 – ongoing)

Task 1: Phase 2 Initiation Meeting

Task 2: Review County Wastewater Planning Authority

Task 3: Information Development and Projections

Task 4: Stakeholder Involvement

Task 5: Reports and Meetings

- **POTW Workshops No. 3, 4 and 5**
 - No. 3 Wastewater Needs Assessment (2/13/07)
- **Stakeholder Workshop**

Workshop 1 Recap

POTW Review (Capacity and Expansion Plans)

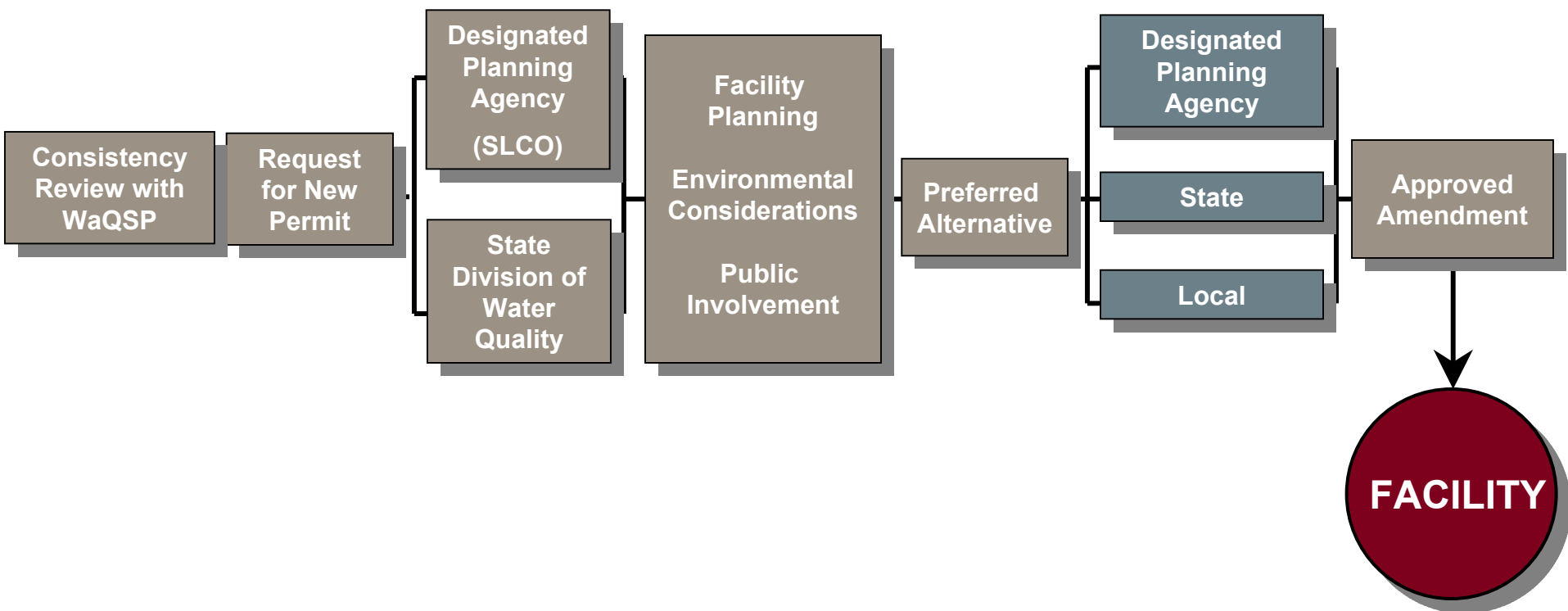
- SLCWRF, CVWRF, SVWRF, Magna WRF
- Proposed Riverton Plant

Technology Review and Emerging Trends

- Wastewater
- Biosolids
- Water Reclamation and Reuse
- Decentralized WW Management
- Facility Siting (Being a good neighbor)

Workshop 2 Recap

(Proposed Permitting Process)





Workshop 3 Recap

208 Projected Average Daily Flows

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PLANNING AREA	FLOW	YEAR			
		1980	1990	2000	2005 (recorded)
Salt Lake City (SLCWRF)	Flow (mgd)	36.0	36.6	37.1	34
	BOD ₅ (lb/day)	37,000	37,800	39,500	73,853
Magna (Magna WRF)	Flow	1.2	1.5	1.7	2.4
	BOD ₅	1,700	2,200	2,500	5,261
Lower Jordan (CVWRF)	Flow	40.0	45.0	51.0	53.4
	BOD ₅	55,700	63,000	71,300	115,736
Upper Jordan (SVWRF)	Flow	16.0	24.0	32.0	29.5
	BOD ₅	23,500	35,300	47,000	63,947



Workshop 3 Recap

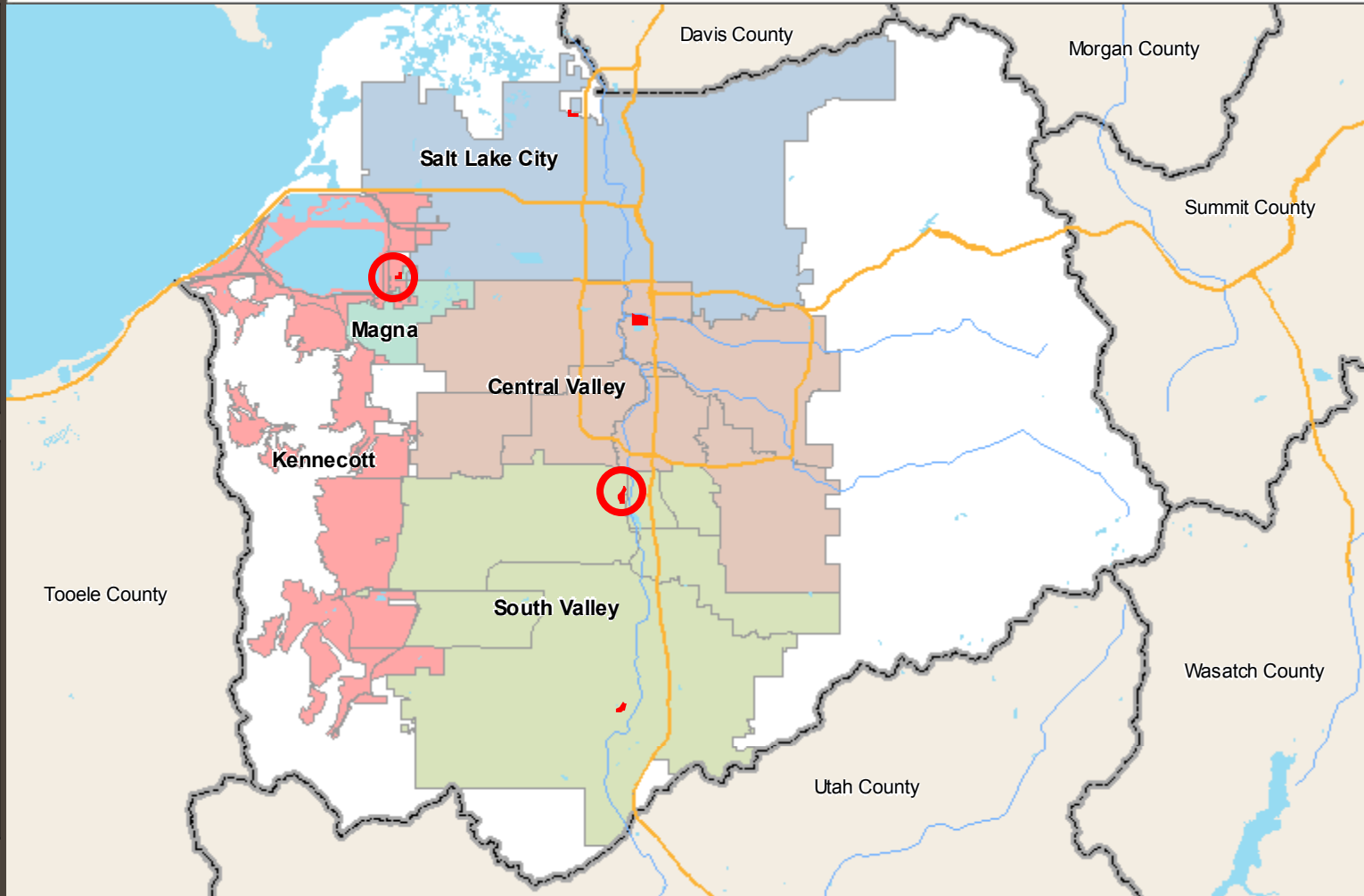
(Baseline - Current WRF Capacity)

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Alt 1 - 2030		
	2030 Flows	Current Cap
SLCWRF	38	56
Magna WRF	4	3.3
CVWRF	68	75
SVWRF	57	50

Alt 1 - Surplus Capacity	
	ADF (mgd)
SLCWRF	18.4
Magna WRF	- 0.7
CVWRF	7.5
SVWRF	- 6.7





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Workshop 3 Recap

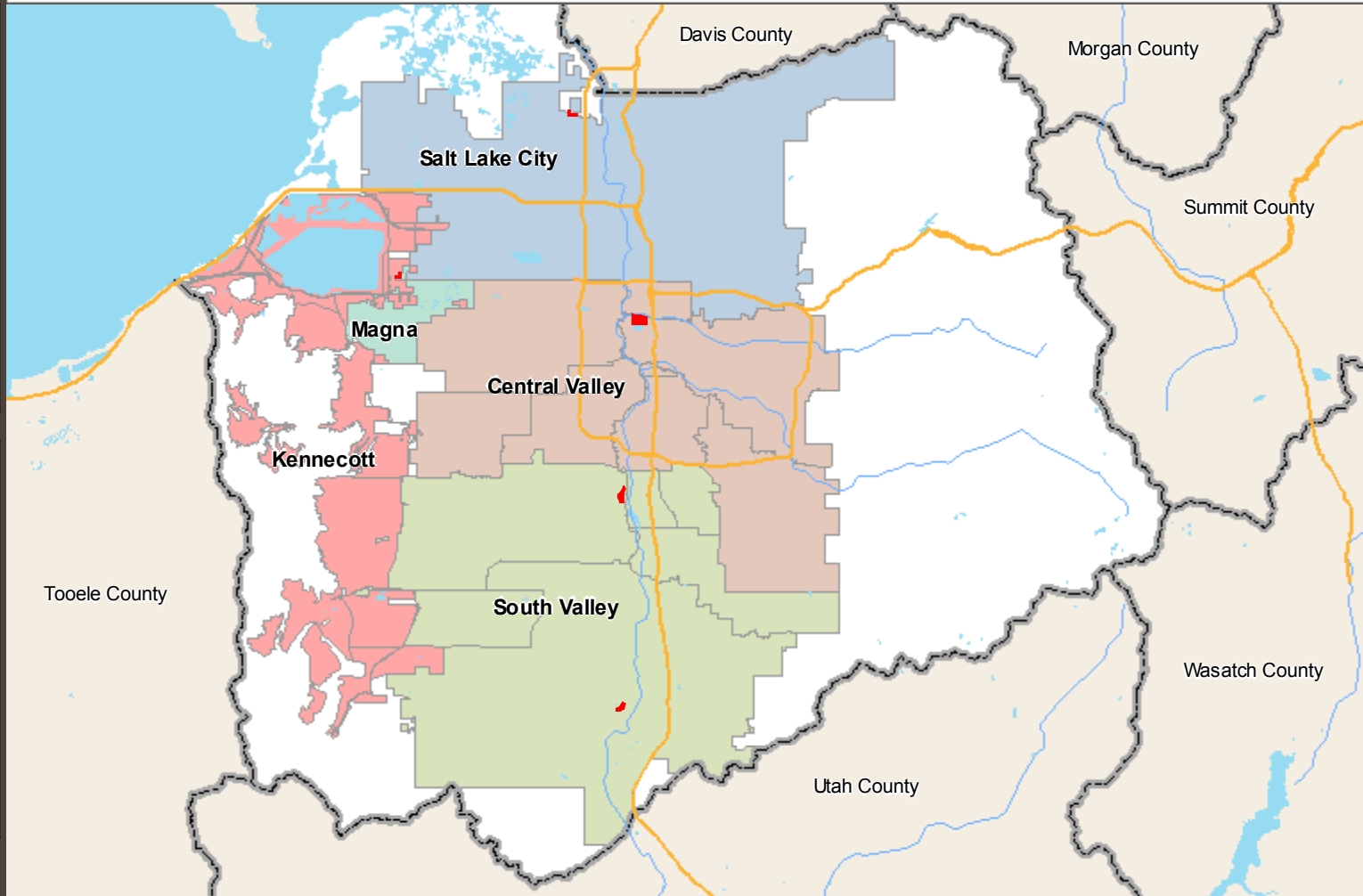
(Baseline - Ultimate WRF Capacity)

BROWN AND CALDWELL

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Alt 1 – 2030		
	2030 Flows	Ultimate Cap
SLCWRF	38	56
Magna WRF	4	6
CVWRF	68	100
SVWRF	57	80

Alt 1 – Surplus Capacity	
	ADF (mgd)
SLCWRF	18.4
Magna WRF	2.0
CVWRF	32.5
SVWRF	23.3





Workshop 3 Recap

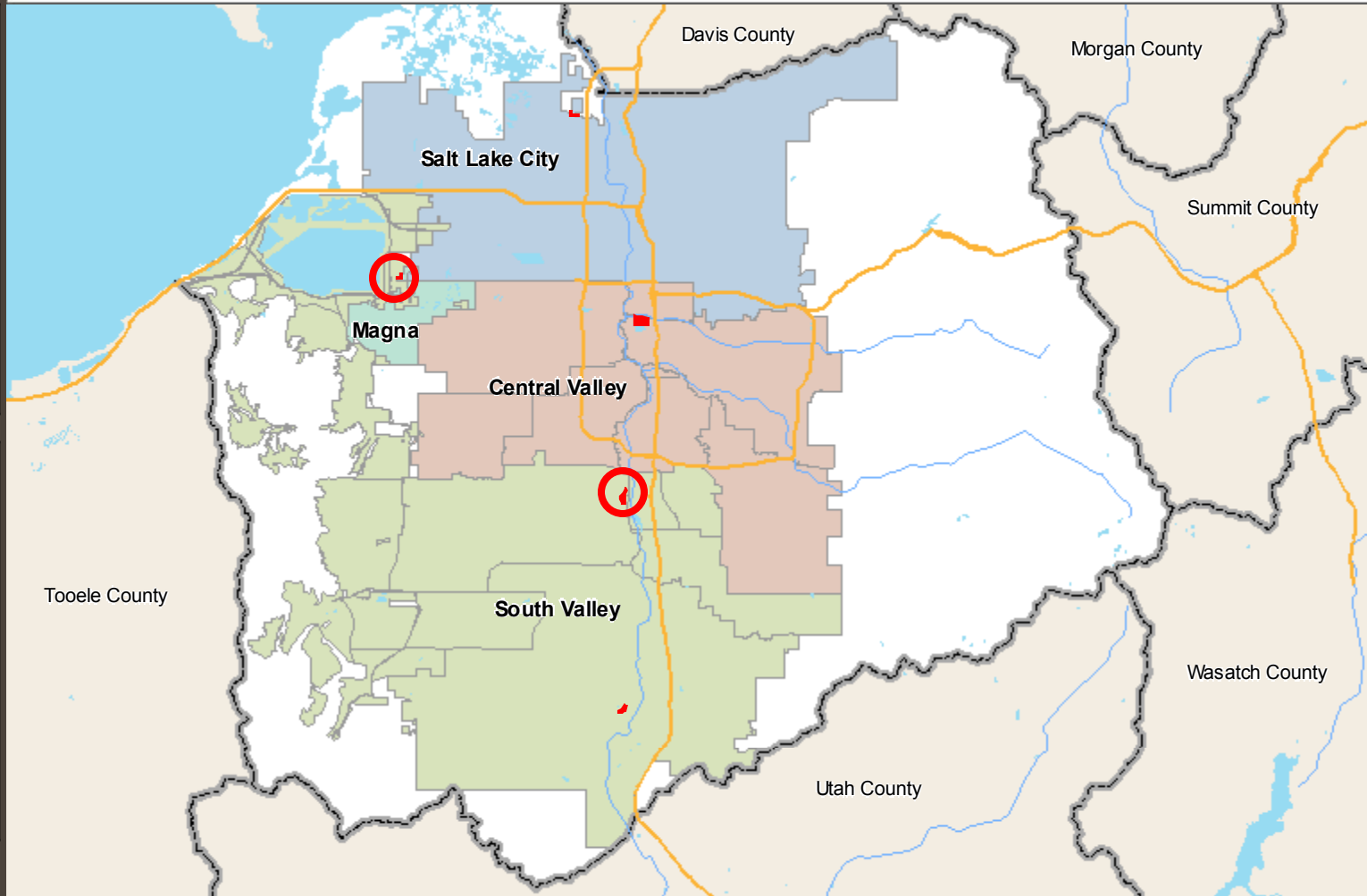
(West Bench Flows - Current WRF Capacity)

BROWN AND CALDWELL

FEBRUARY 20, 2007

Alt 6 – 2030		
	2030 Flows	Current Cap
SLCWRF	38	56
Magna WRF	4	3.3
CVWRF	68	75
SVWRF	67	50

Alt 6 – Surplus Capacity	
	ADF (mgd)
SLCWRF	18.4
Magna WRF	- 0.7
CVWRF	7.5
SVWRF	- 16.6





Workshop 3 Recap

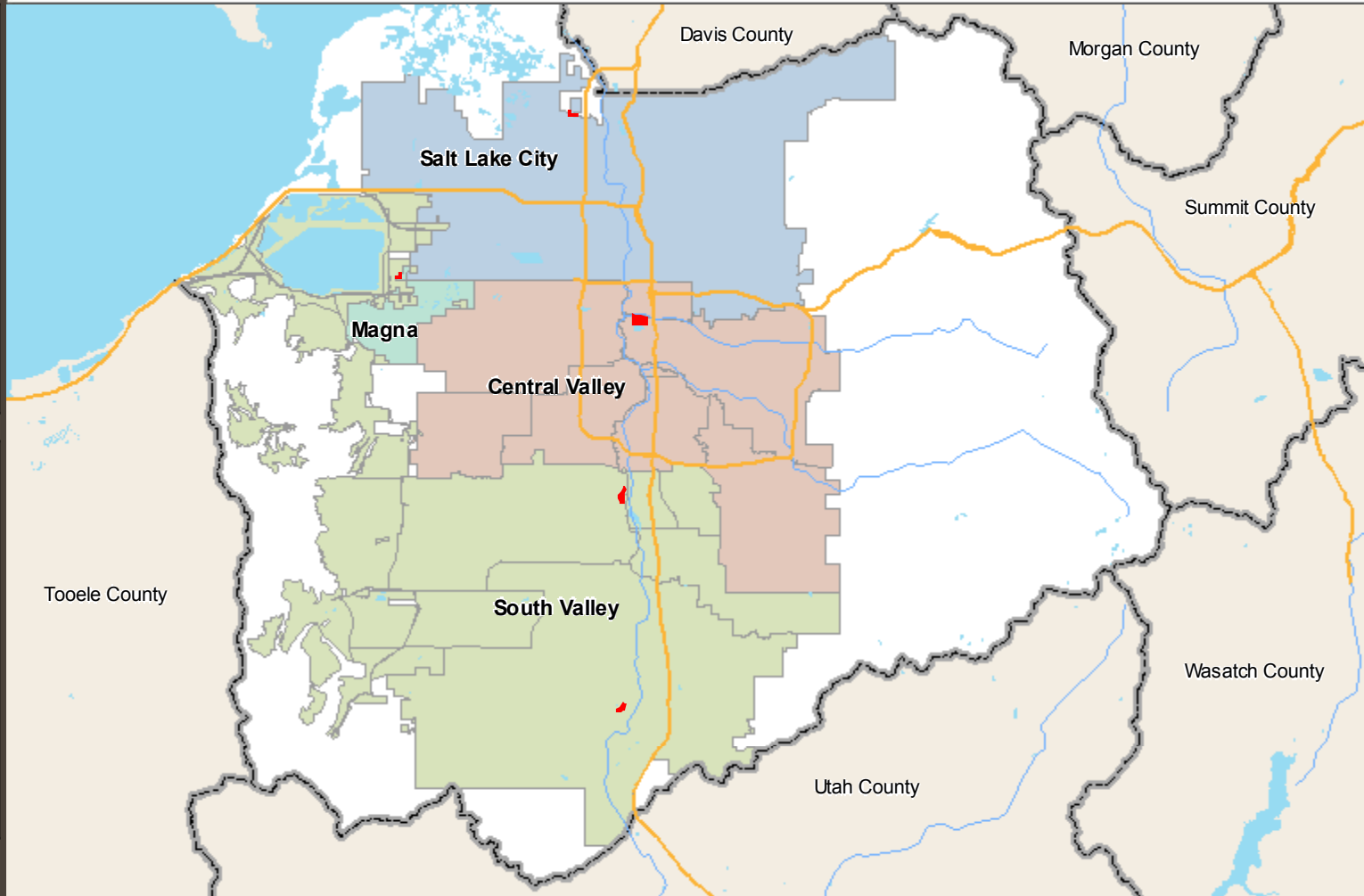
(West Bench Flows - Ultimate WRF Capacity)

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Alt 6 – 2030		
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Alt 6 – Surplus Capacity	
	ADF (mgd)
SLCWRF	18.4
Magna WRF	2.0
CVWRF	32.5
SVWRF	13.4



Planned Future Tasks

Future Tasks:

- Compare current wastewater setting to the original 208 plan
- Evaluate potential reuse initiatives including decentralized “scalping facilities”
- Define regional permitting process
- Workshops and reporting

Potential Tasks:

- Evaluation of county-wide sewer capacity and flow routing alternatives.