

Jordan River TMDL - Work Element 2



February 20, 2006

Jordan River TMDL

Phase 1 Lower Jordan TMDL

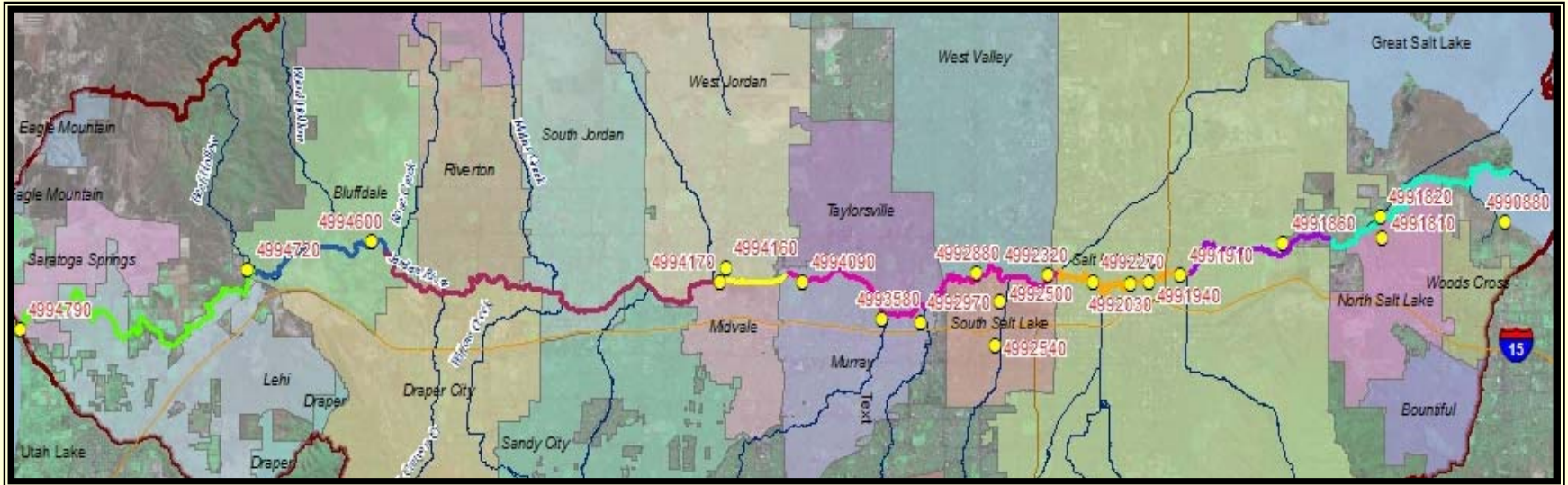
- Segments 1 and 2.
- Data evaluation completed June 2006.
- Initial Load Calculations completed July 2006.
- Computer modeling completed July 2006.

Phase 1b – Jordan River TMDL

- All segments on 2006 303(d) list.
- Data Evaluation – completed December 2006.
- Pollutant Source Characterization.
- Beneficial Use Impairment.
- Water Quality modeling.

Phase 2 – Jordan River TMDL

- Load Allocations and Reductions.
- Water Quality Modeling.
- Draft TMDL – November 2007.
- Final TMDL – February 2008.

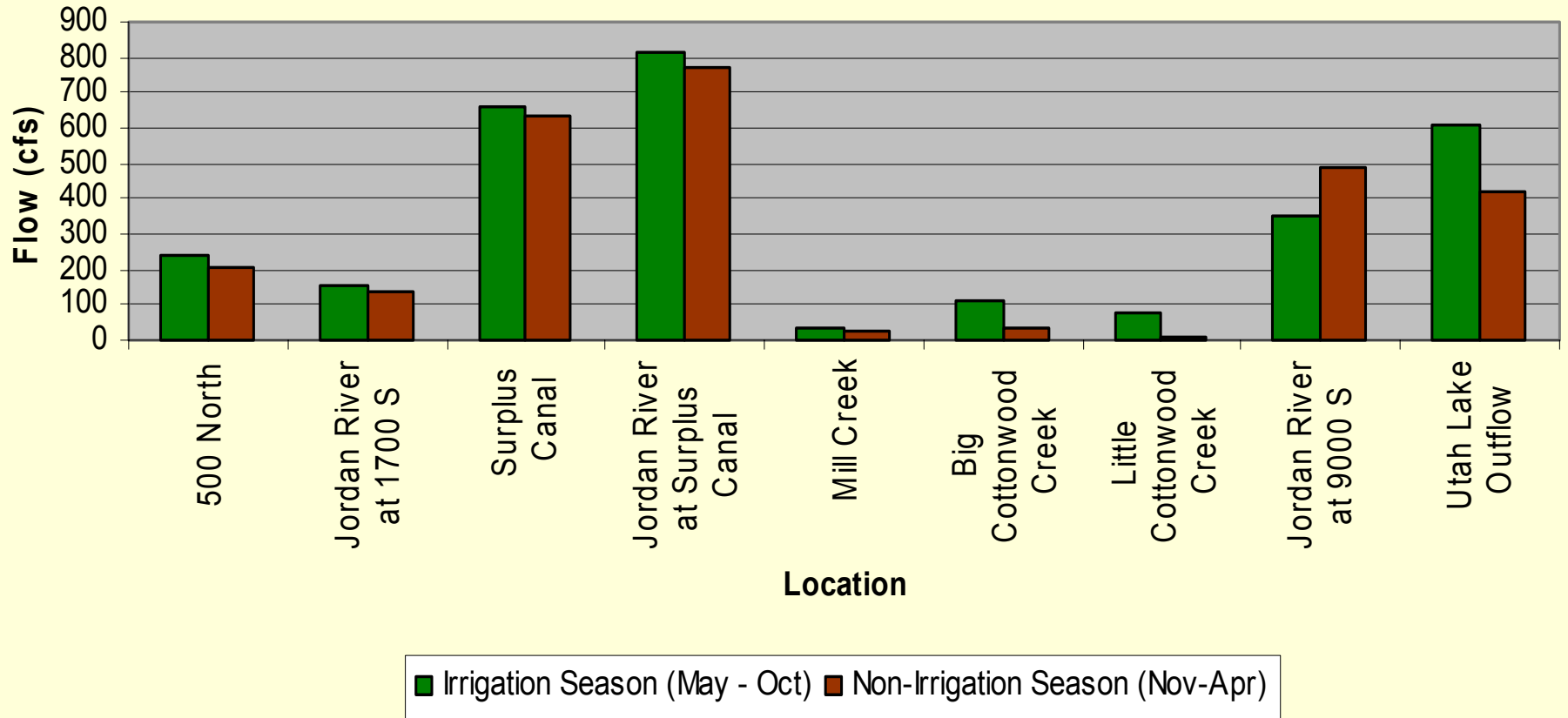


- Pollutant source characterization
 - Flow assessment / Water budget.
 - Load assessment by source.
 - Document linkage between DO and processes that affect DO.

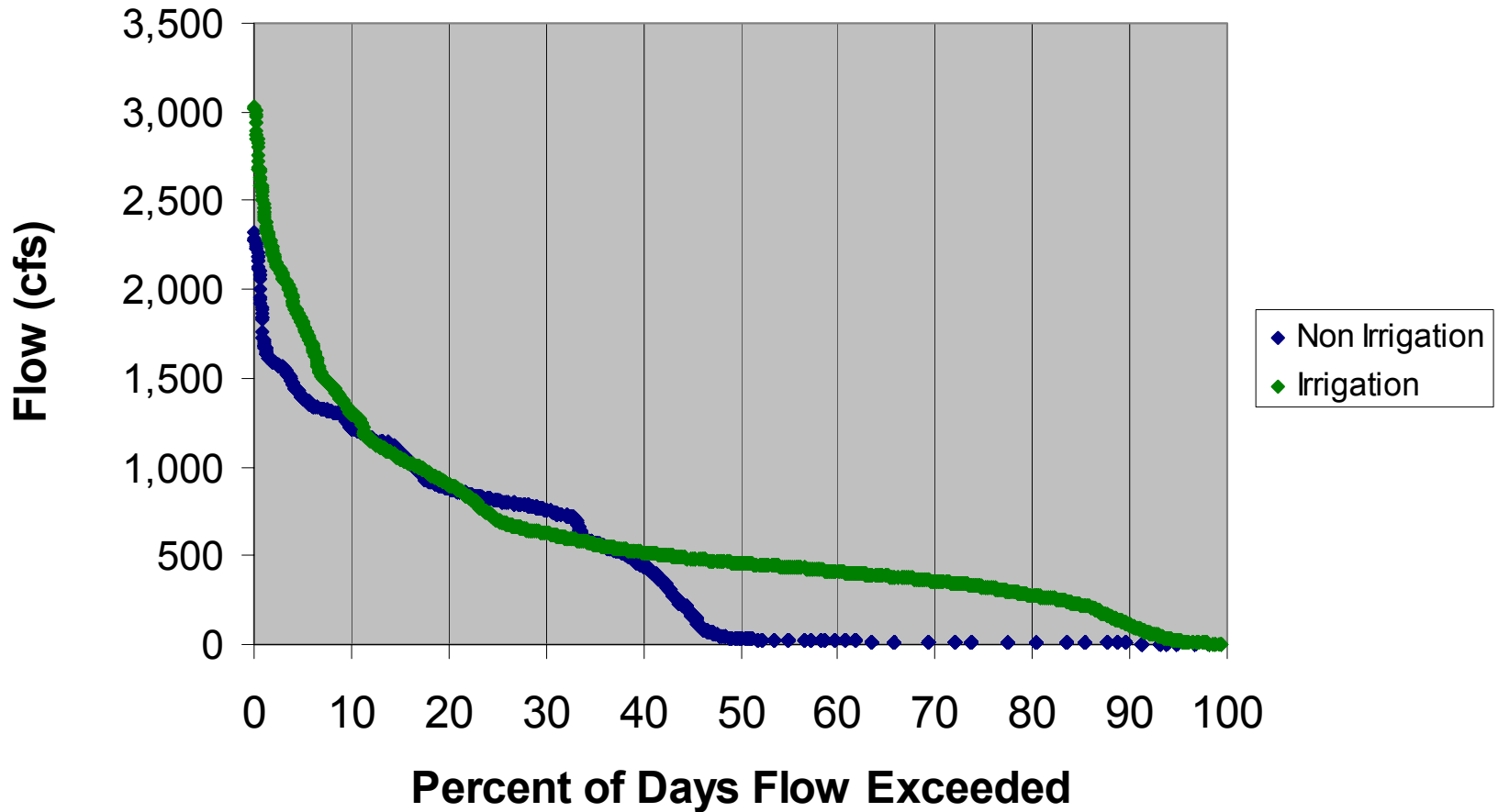
Water Budget Components

- Define hydrologic regime of Jordan River associated with pollutant loading.
 - Utah Lake
 - Tributary flow
 - Permitted Discharge
 - Surface Runoff
 - Groundwater
- Not finalized at this time.
 - Numerous studies completed with conflicting results.
 - Utah DWR 1997, Borrup 2000, CH2MHill 2005.

Jordan River Seasonal Flow (1980 - Present)



Jordan River above Turner Dam (1980 - 2005)



Stations	n	Percent of days flow is exceeded				
		90	75	50	25	10
Jordan River Above Turner Dam	4,495	6	12	30	802	1,195
	4,784	88	316	453	680	1,250
Jordan River at 9000 South	4,465	40	59	93	937	1,280
	4,564	46	69	92	411	1,090
Little Cottonwood Creek	2,912	1	4	6	12	25
	3,080	6	12	30	88	226
Jordan River at 2100 South	4,108	245	272	424	1,230	1,620
	4,201	291	342	442	1,040	1,770
Jordan River at 1700 South	4,289	87	111	135	167	188
	4,385	106	122	146	175	215
Jordan River at 500 North	3,473	121	149	193	243	286
	3,529	143	176	215	271	349

Note: shaded rows indicate non-irrigation season values.

Jordan TMDL Pollutant Source Characterization

Identify pollutant sources

- Utah Lake.
- Tributary streams.
- Permitted Discharge.
- Stormwater.
- Diffuse runoff.
- Groundwater.
- Background Conditions.

Calculate loads at monitoring stations

- Annual and seasonal loads.
- Flow data (1980 – 2005).
- WQ data (1995-2005).
- Represents loading from upstream sources.

Calculate loads for each source

- Focus on impaired segments.
- Appropriate spatial and temporal detail.
- Group sources where needed.