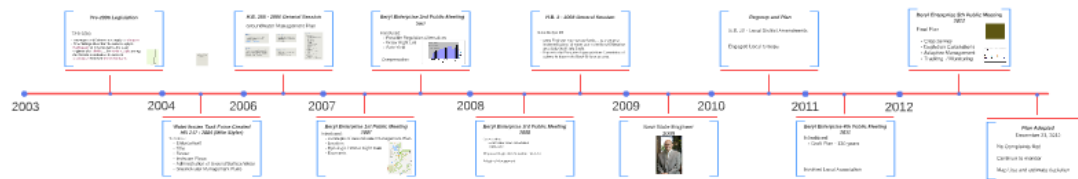


Timeline



Groundwater Management Plans
 Beryl Enterprise Experience
 James Greer
 Assistant Sales Engineer - Local Division of Water Rights



Conclusion
 The Law Works
 Cooperation



Groundwater Management Plans

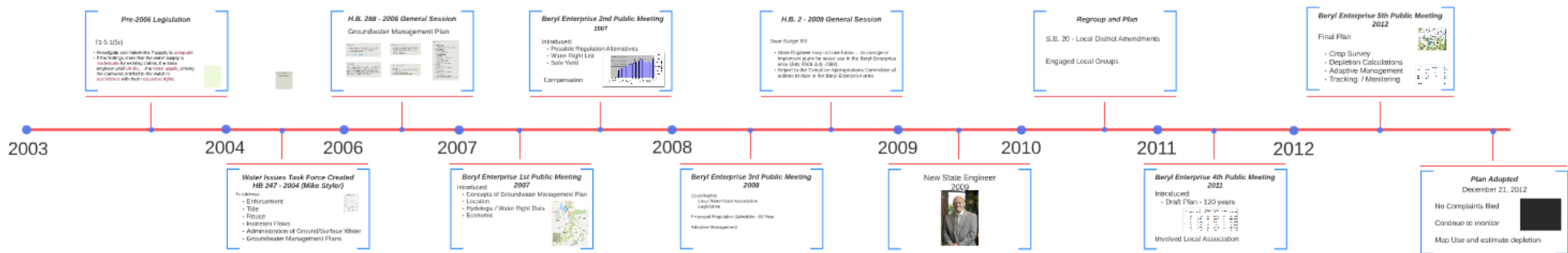
Beryl Enterprise Experience

James Greer

Assistant State Engineer - Utah Division of Water Rights



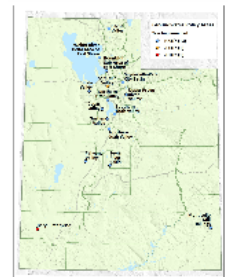
Timeline

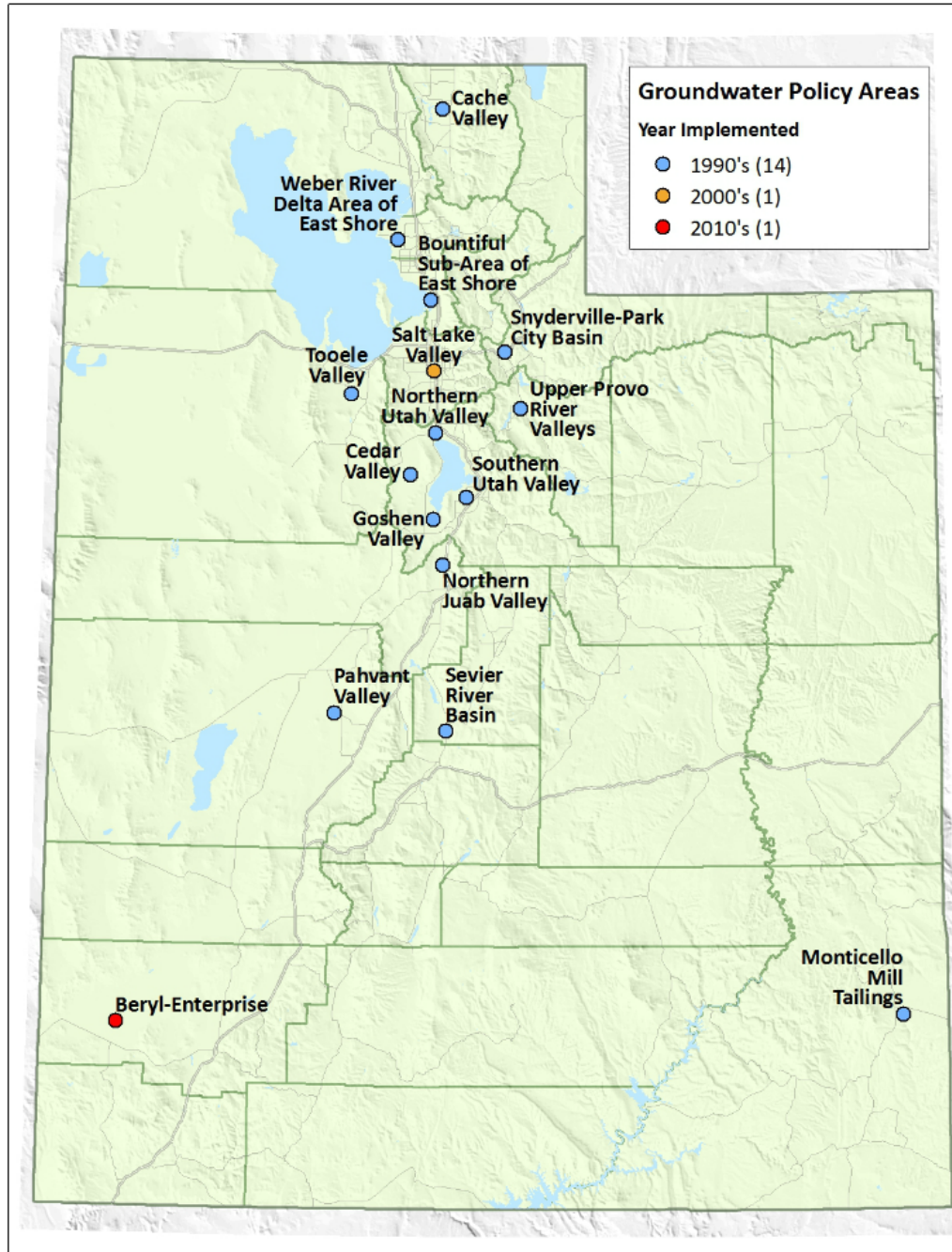


Pre-2006 Legislation

73-5-1(5c)

- Investigate and Determine if supply is **adequate**
- If the findings show that the water supply is **inadequate** for existing claims, the state engineer shall **divide**,...,the **water supply** among the claimants entitled to the water in **accordance** with their **respective rights**





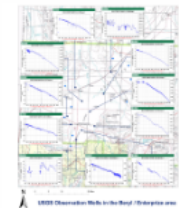
2004

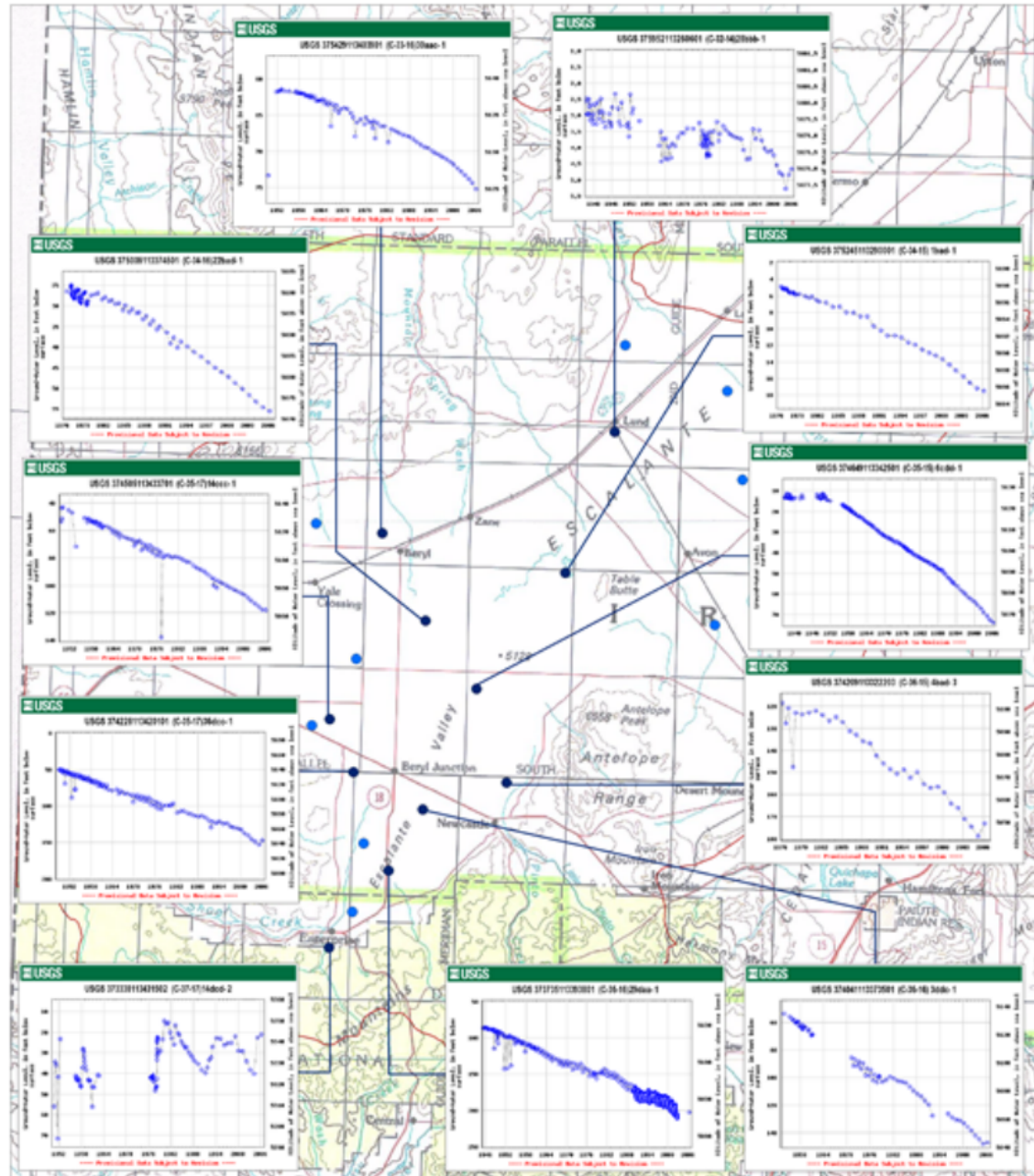
2006

***Water Issues Task Force Created
HB 247 - 2004 (Mike Styler)***

To Address:

- Enforcement
- Title
- Reuse
- Instream Flows
- Administration of Ground/Surface Water
- Groundwater Management Plans





USGS Observation Wells in the Beryl / Enterprize area

I was hired By the Division in 2005 Groundwater Management Plan Beryl Enterprise Area



H.B. 288 - 2006 General Session

Groundwater Management Plan

Objectives

- Limit Groundwater withdrawals to safe yield
- Protect physical integrity of the aquifer
- Protect water quality

Principles of Prior Appropriation

Safe Yield

"The amount of groundwater that can be withdrawn from a groundwater basin over a period of time without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical and chemical integrity" (73-5-15(1b))

Critical Management Areas

- Area where Actual groundwater withdrawals consistently exceed the safe yield.
- Gradual implementation to minimize economic and other impacts
- Voluntary arrangements

Voluntary Arrangements

- Voluntary
- Distribution of Regulation other than Priority within the group
- Consistent with other laws
- Consultation with the State Engineer

Plan Process

- Identify Areas
 - State Engineer
 - 1/3 of Water Right Owners in Basin
- Provide Notice
 - Select Entities
 - Water Right Holders
- Hold Public Meeting
 - Address Needs
 - Hydrology
 - Present the Data / Reports
 - Safe Yield
 - Administrative Costs
 - Regulation
 - Receive Public Comments
- Draft Plan
 - Give Notice
 - Receive Public Comments
- Revise Plan
 - Give Notice
 - Receive Public Comments
- Adopt Plan
 - Give Notice
 - Receive Public Comments
- Aggrieved Persons May File Complaints

2006

2007

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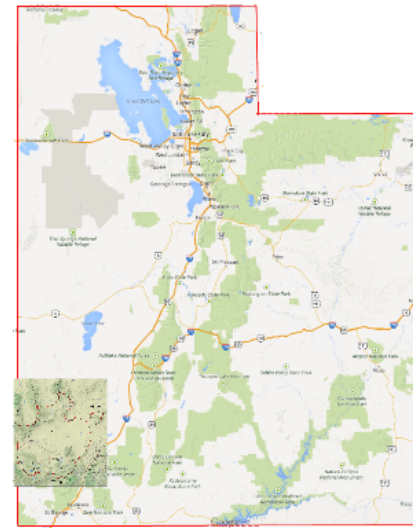
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2007

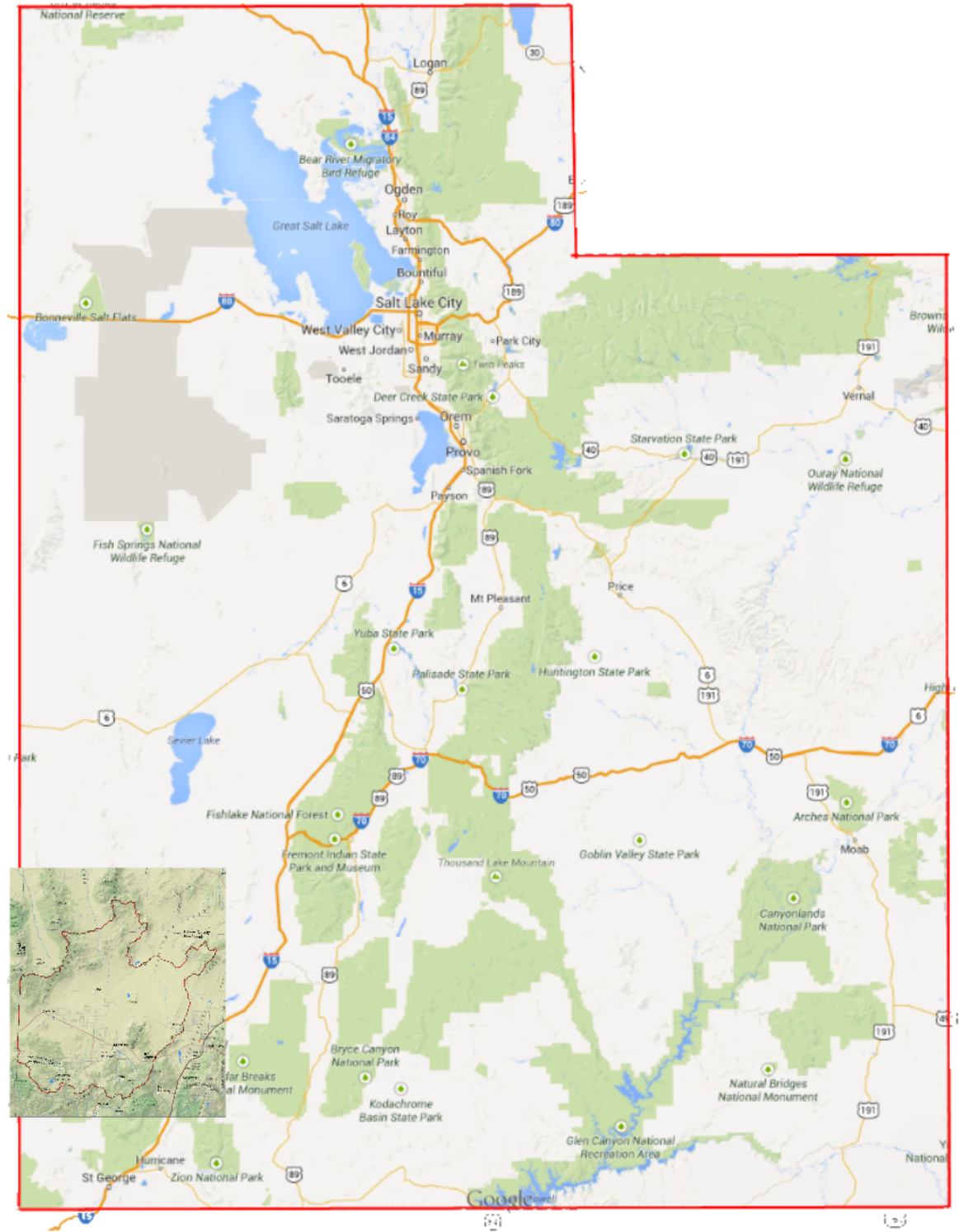
Beryl Enterprise 1st Public Meeting **2007**

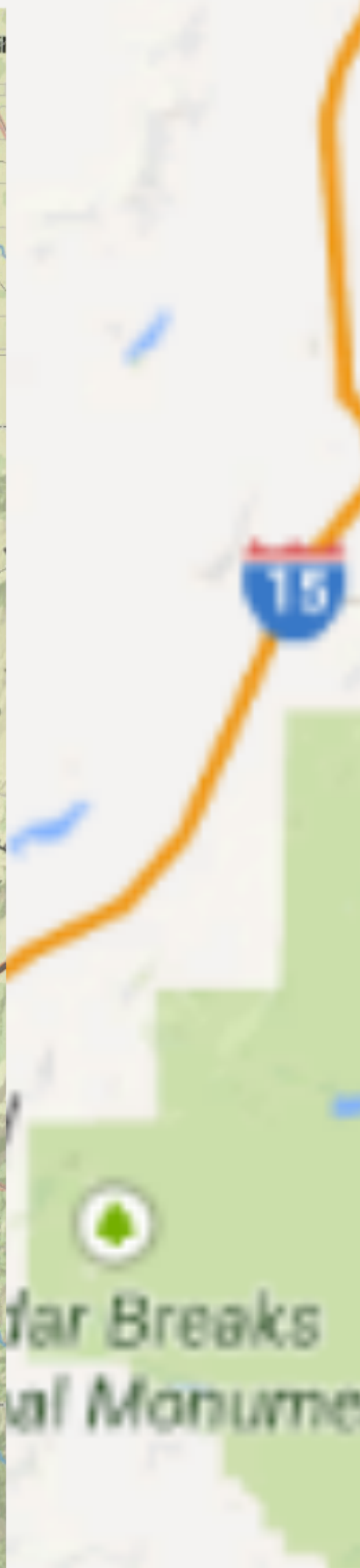
Introduced:

- Concepts of Groundwater Management Plan
- Location
- Hydrologic / Water Right Data
- Economic



ata





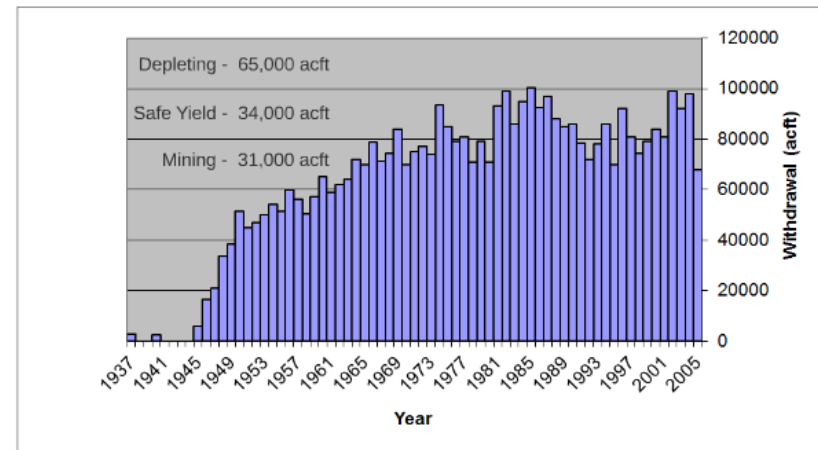
Beryl Enterprise 2nd Public Meeting

2007

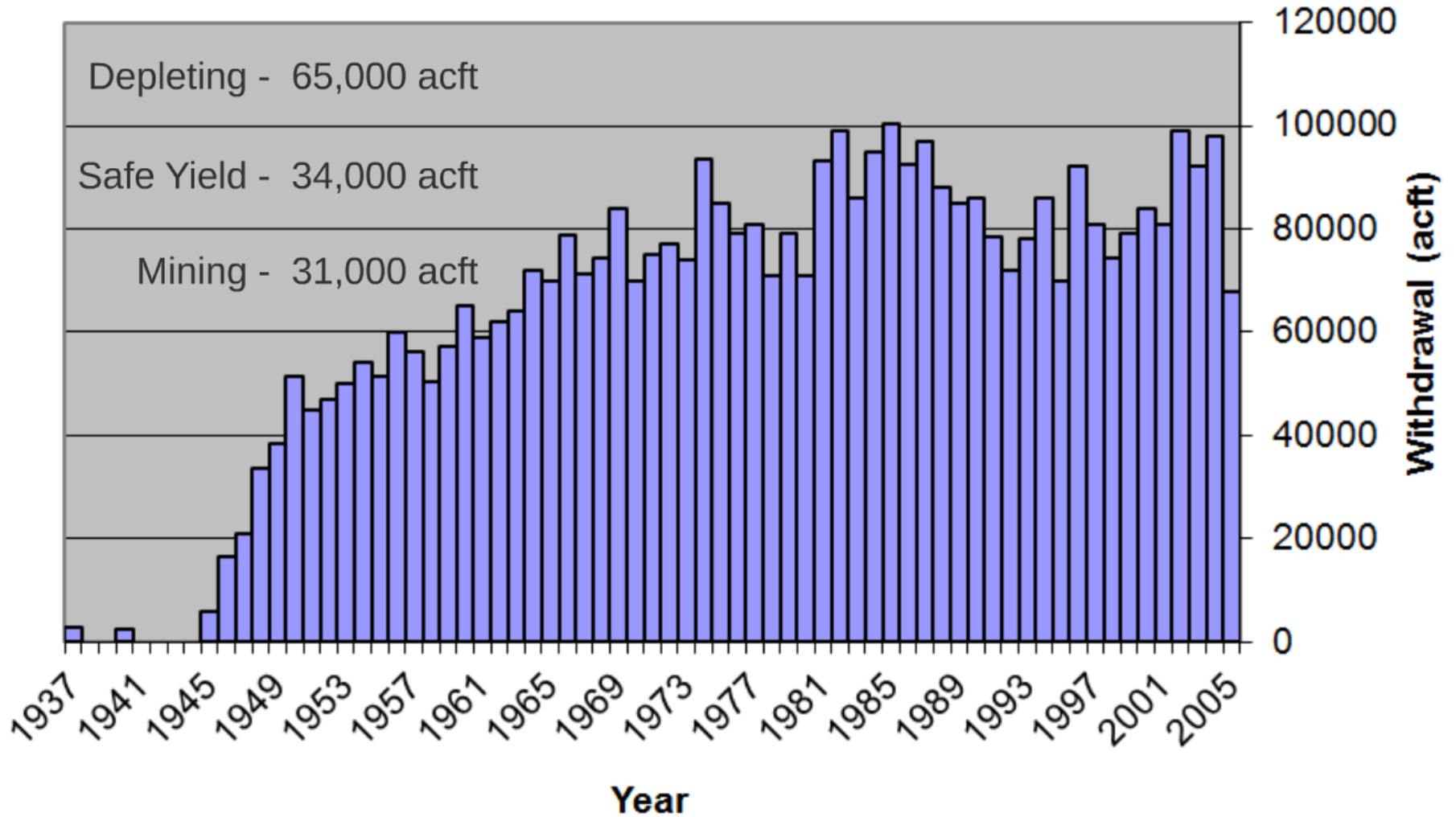
Introduced:

- Possible Regulation Alternatives
- Water Right List
- Safe Yield

Compensation



n Alternatives





2008



Beryl Enterprise 3rd Public Meeting 2008

Coordination

Local Water User Association
Legislature

Proposed Regulation Schedule - 90 Year

Adaptive Management

H.B. 2 - 2008 General Session

Base Budget Bill

- State Engineer may not use funds ... to change or implement plans for water use in the Beryl-Enterprise area (July 2008-July 2009).
- Report to the Executive Appropriations Committee all actions to date in the Beryl-Enterprise area

2009

2009

2010

New State Engineer
2009



Regroup and Plan

S.B. 20 - Local District Amendments

Engaged Local Groups

2010

2011

2011

2012

Beryl Enterprise 4th Public Meeting 2011

Introduced:

- Draft Plan - 120 years

Phase	Percent Reduction	Acre Feet Reduction*	Cumulative Percent Reduction	Cumulative Acre Feet Reduction*	Time Frame	Required Reduction Date
1	5%	3,250 acft	5%	3,250 acft	20 yr	Oct. 31, 2030
	5%	3,250 acft	10%	6,500 acft		Oct. 31, 2050
2	5%	3,250 acft	15%	9,750 acft	10 yr	Oct. 31, 2060
	5%	3,250 acft	20%	13,000 acft	10 yr	Oct. 31, 2070
	5%	3,250 acft	25%	16,250 acft	10 yr	Oct. 31, 2080
	5%	3,250 acft	30%	19,500 acft	10 yr	Oct. 31, 2090
	5%	3,250 acft	35%	22,750 acft	10 yr	Oct. 31, 2100
	5%	3,250 acft	40%	26,000 acft	10 yr	Oct. 31, 2110
	5%	3,250 acft	45%	29,250 acft	10 yr	Oct. 31, 2120
	3%	1,750 acft	48%	31,000 acft	10 yr	Oct. 31, 2130

Involved Local Association

Plan - 120 years

Phase	Percent Reduction	Acre Feet Reduction*	Cumulative Percent Reduction	Cumulative Acre Feet Reduction*	Time Frame	Required Reduction Date
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	5 %	3,250 acft	25 %	16,250 acft	10 yr	Oct. 31, 2080
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 Local Association

Beryl Enterprise 4th Public Meeting 2011

Introduced:

- Draft Plan - 120 years

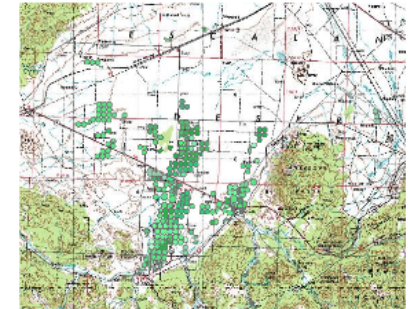
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Involved Local Association

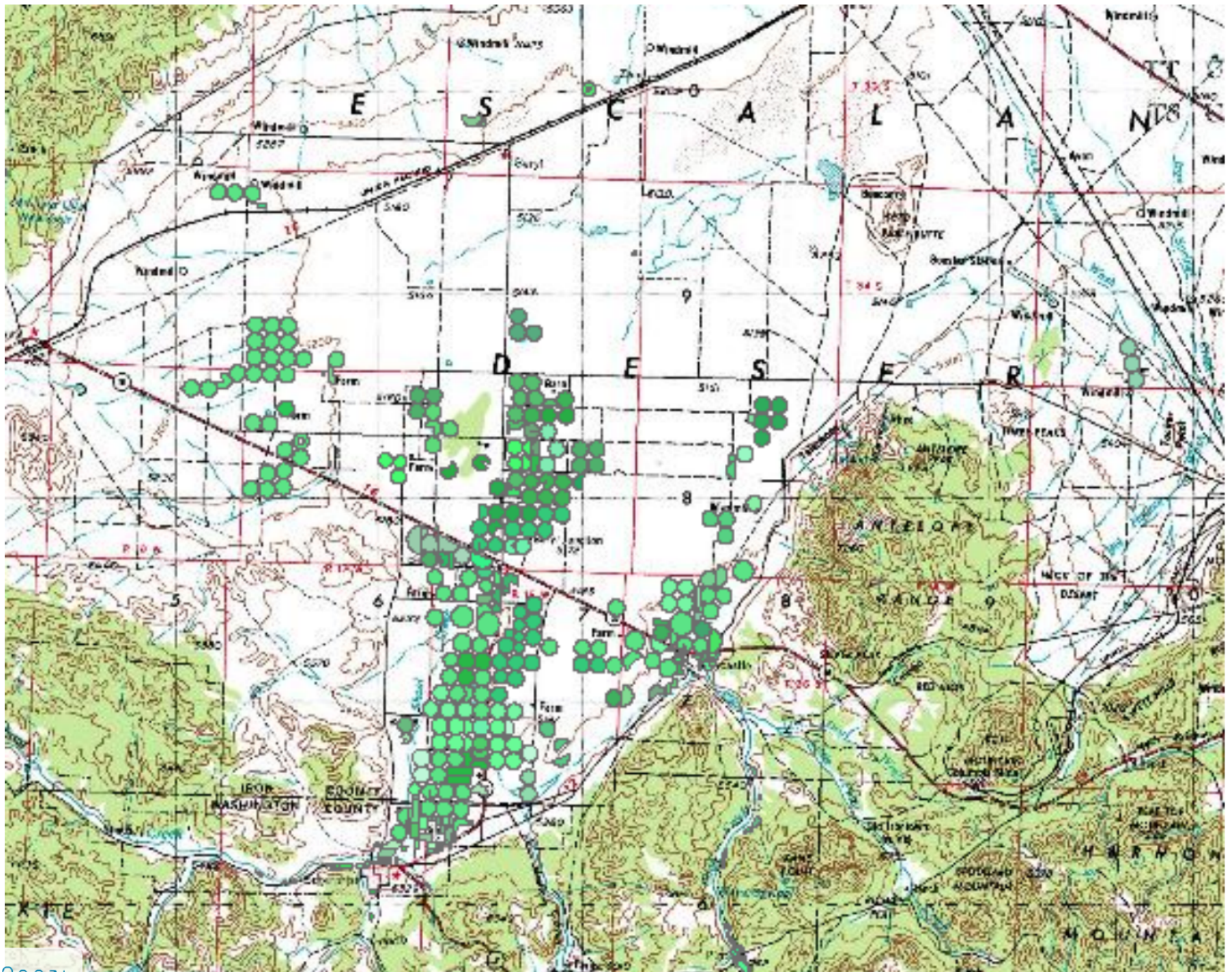
Beryl Enterprise 5th Public Meeting 2012

Final Plan

- Crop Survey
- Depletion Calculations
- Adaptive Management
- Tracking / Monitoring



Crop Type	Acres	Net Irr (acre-feet/acre)	Consumptive Use (acre-feet)
Corn	2,978	1.3833	4,120
Grain/Alfalfa	1,829	1.8000	3,292
Grain	1,157	1.6625	1,924
Potatoes	148	1.4050	208
Alfalfa	22,922	2.4925	57,133
Total	29,034		66,676
Baseline	28,996	2.4925	72,273
Reductions			5,596



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 Local Association

Plan Adopted

December 21, 2012

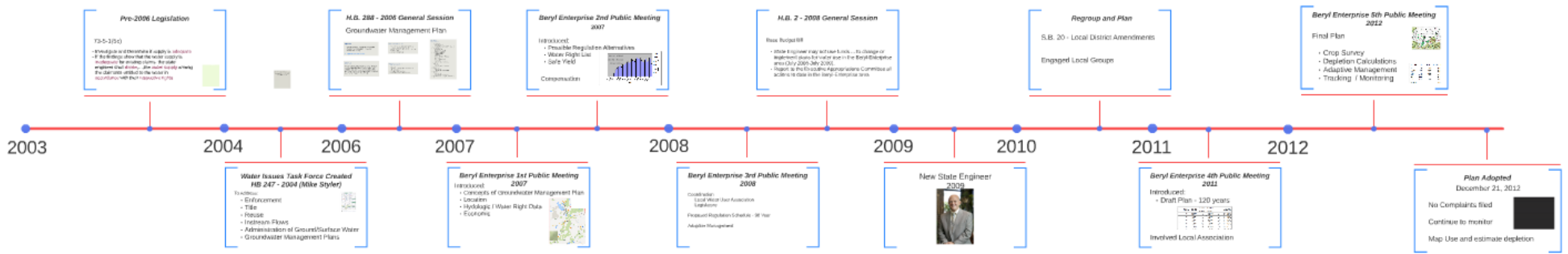
No Complaints filed

Continue to monitor

Map Use and estimate depletion



Timeline





Conclusion

The Law Works

Cooperation