Mid-Kaweah Groundwater Sustainability Agency

Board Meeting

January 10, 2017

Data Management and Public Involvement

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Data Management System (DMS)

- What is a DMS?
- Functionality
- Public Involvement and Levels of Access

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What is a DMS?

- Database with pertinent hydrologic, geologic and geographic information
- Required by SGMA for Groundwater Sustainability Plans (GSPs)
- Keeps all information in an organized and secure location for the GSA, local agencies/districts, individual water users, and the public
- Used to track and assess basin groundwater conditions and sustainability
- Provides an online, interactive mapping interface (GIS) to facilitate rapid data review
- Based on DWR's own DMS system for SGMA

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DMS Functionality

- Data storage
- Data visualization (maps and graphs)
- Data review and analysis
- Track basin conditions
- Track and define sustainability criteria
- GSP compliance tracking and SGMA reporting
- Target future basin management actions and projects
- Assist with future basin management and project planning

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Additional DMS Details

- Shows time series graphs of hydrologic data
- Allows for importation of new data as it becomes available (expandable)
  - Additional datasets outside of the MKGSA
  - Future data collection and monitoring efforts
- Can be expanded to include neighboring GSAs
- Designed so that data can be refined to Management Areas (MA)s or higher resolution

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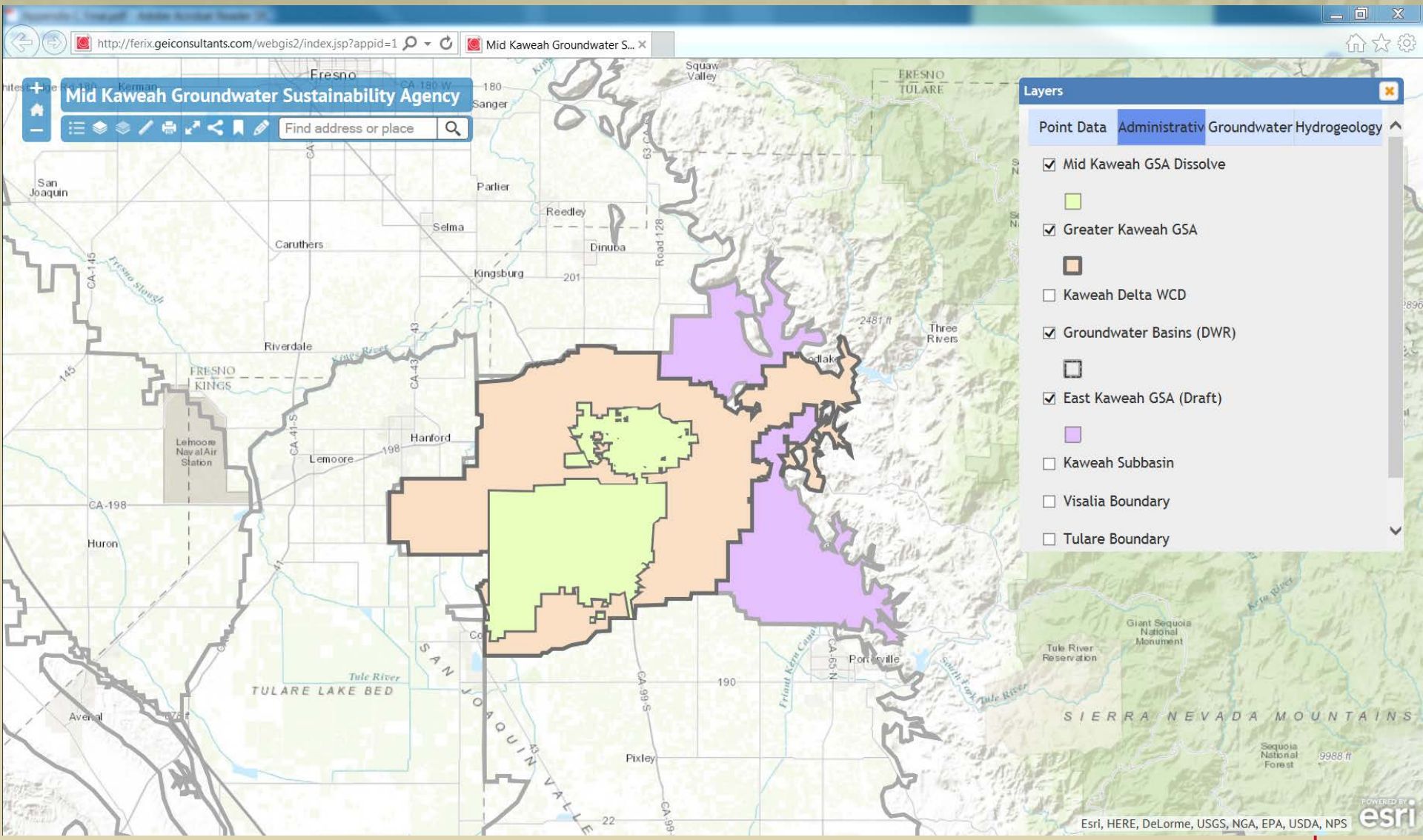
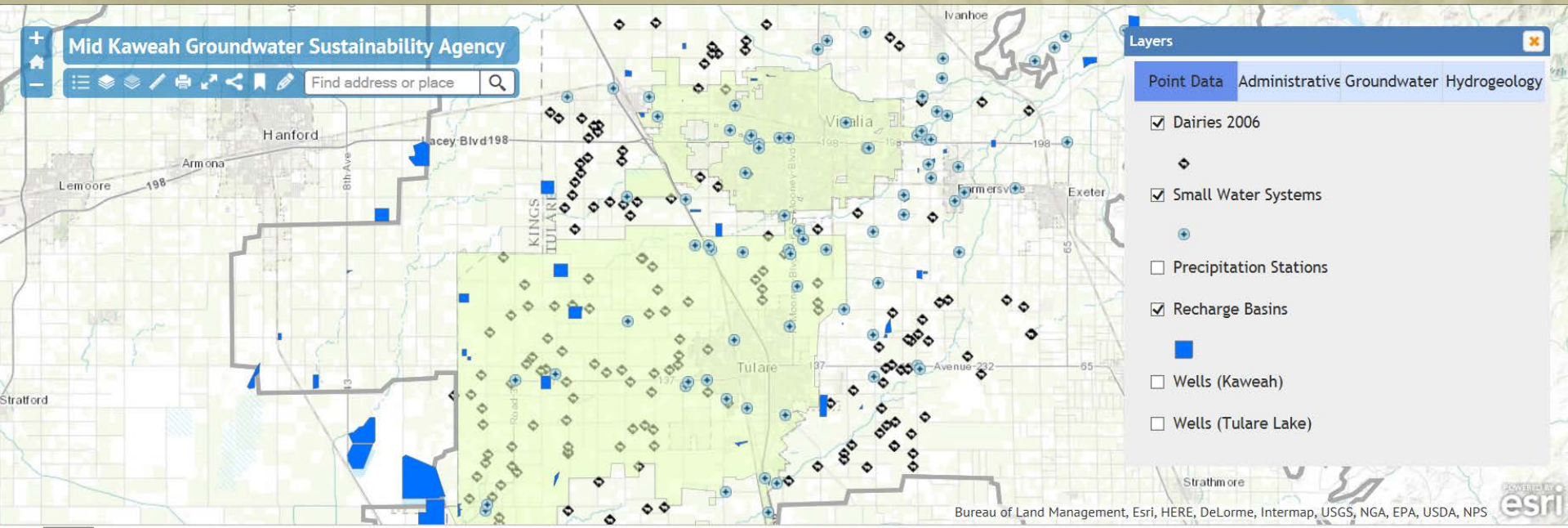
Interactive, Online Mapping



Review Data Tables



Show 25 entries

Small Water Systems

FID	OWNER	S_STREET	S_NUMB	S_TYPE	S_DIR	S_APT	S_COMM	LEGAL	USE	TOT_ACRES	APN_TXT	FACILITY_I	DISTRICT	FACILITY_N	O
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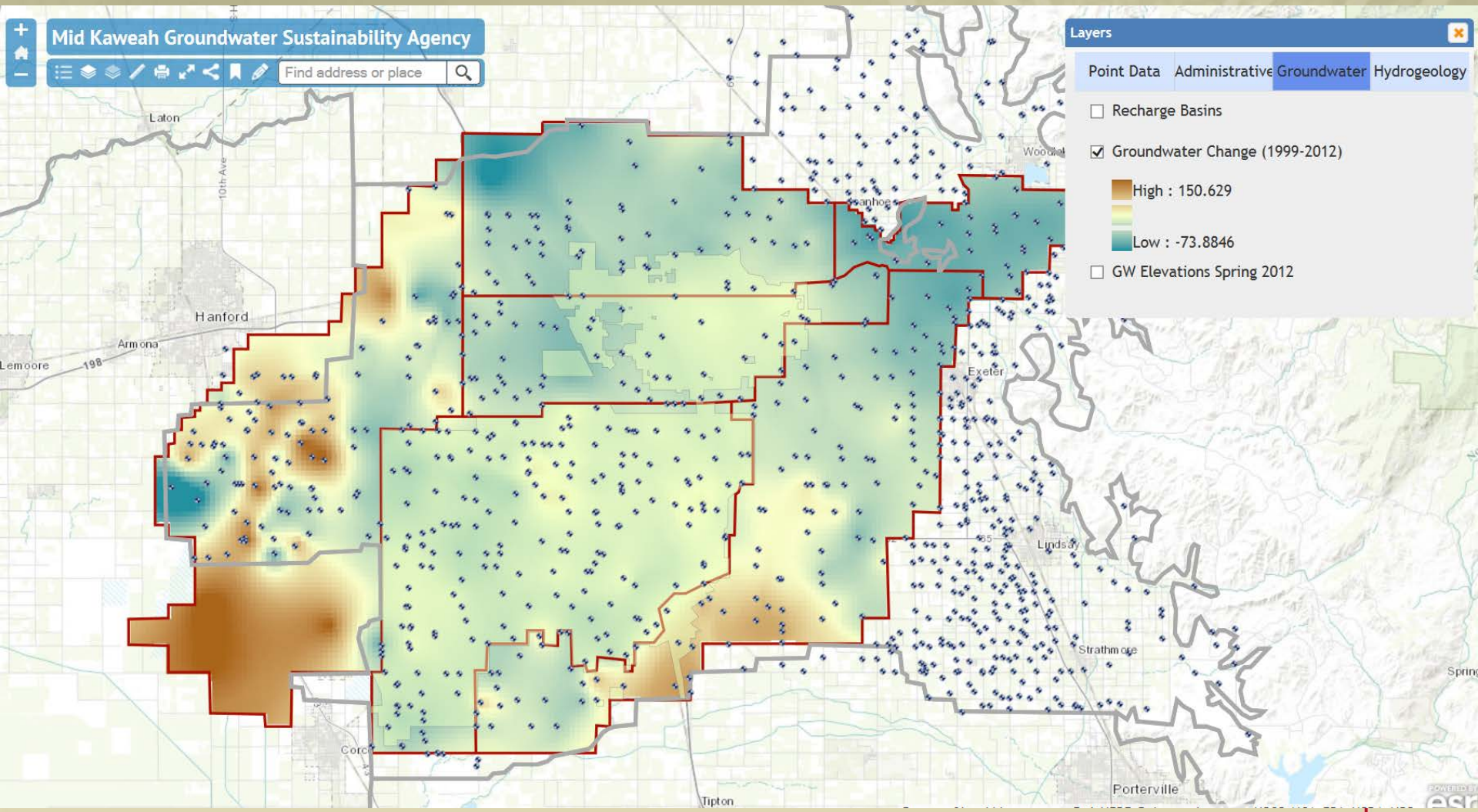
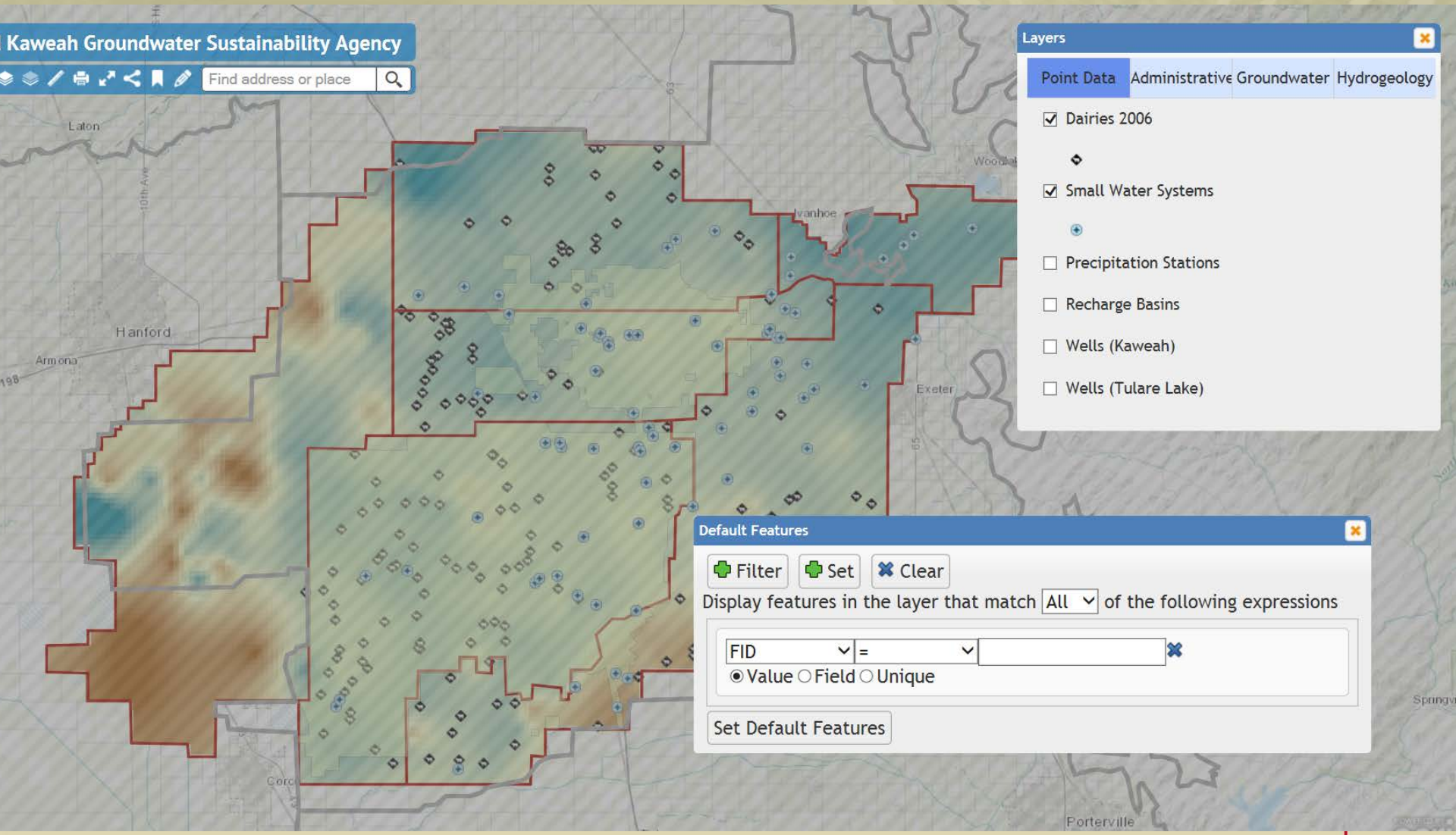
Showing 1 to 25 of 80 entries

Previous 1 2 3 4 Next

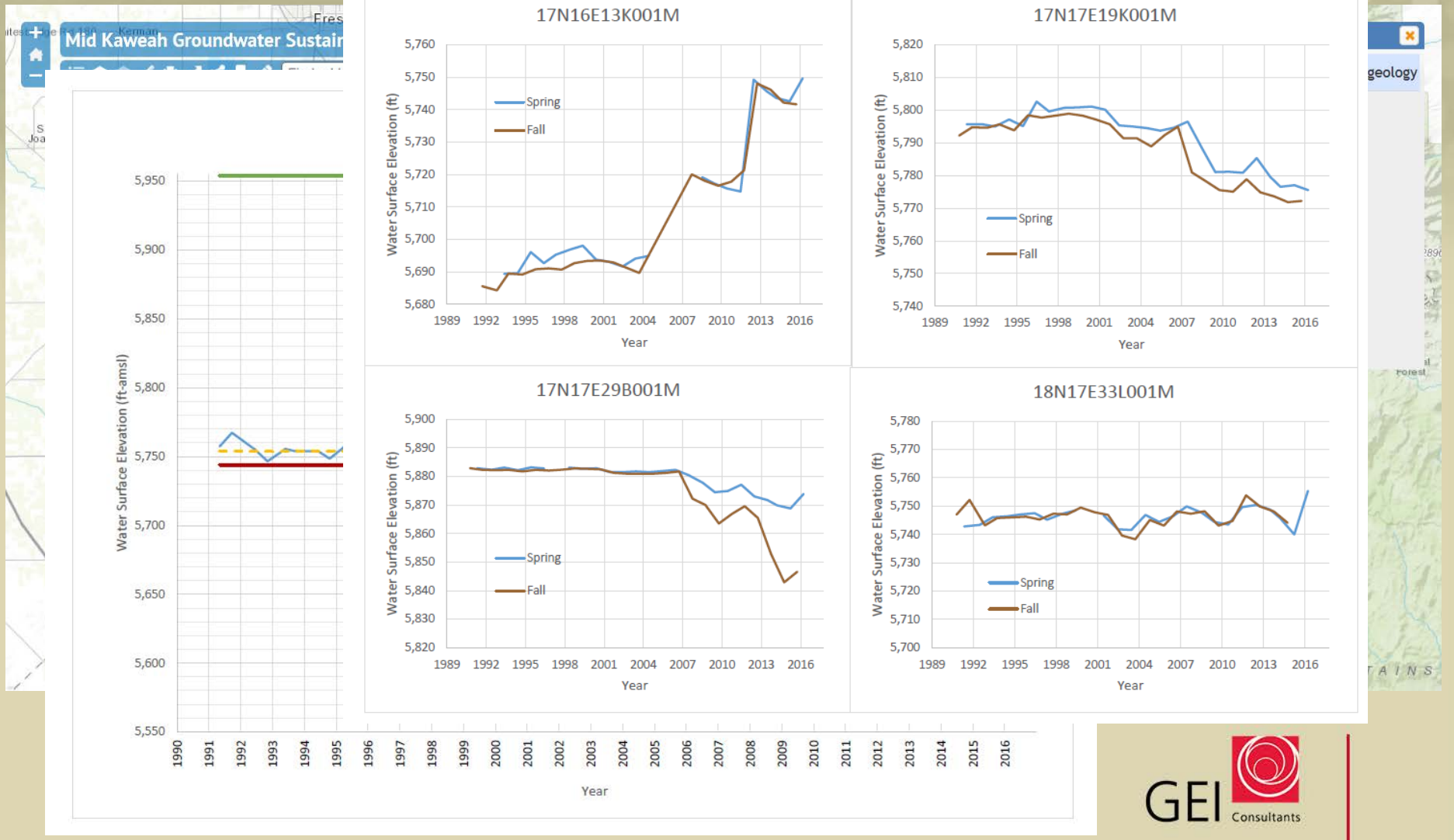
Review Regional Data and Analyses



Search and Query Specific Information



Review Data over Time



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Benefits of a DMS

- Archives and protects valuable data from projects and monitoring programs
- Identifies areas of limited data (data gaps)
- Enhances transparency of basin conditions and facilitates agreement
- Reduces potential of conflict
- Improves quality of the data in the GSP
- Provides cost savings relative to multiple data storage systems

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GSA, Agency and Public Access

- Public Access
  - Online and linked to GSA website
  - Facilitates transparency of basin conditions
  - Improves understanding of basin sustainability
  - Allows data visualization and review
  - Communicates information and data to public without specific software or tools
  - Assists local groundwater users with planning and operations
  - Communicates local conditions related and their relationship to sustainability indicators

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GSA, Agencies and Public Access

- Agency Capabilities
  - Includes same as Public Access
  - Can upload local monitoring data to the database
  - Can download local information to assist with operations and GSP compliance

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GSA, Agencies and Public Access

- GSA Capabilities
  - Includes same as Public Access
  - Perform analyses
  - Automated reporting functions (calculations and graphics) for SGMA compliance
  - Can update database and mapping capabilities
  - Can add additional analyses or functions to facilitate and benefit GSA or local agency management

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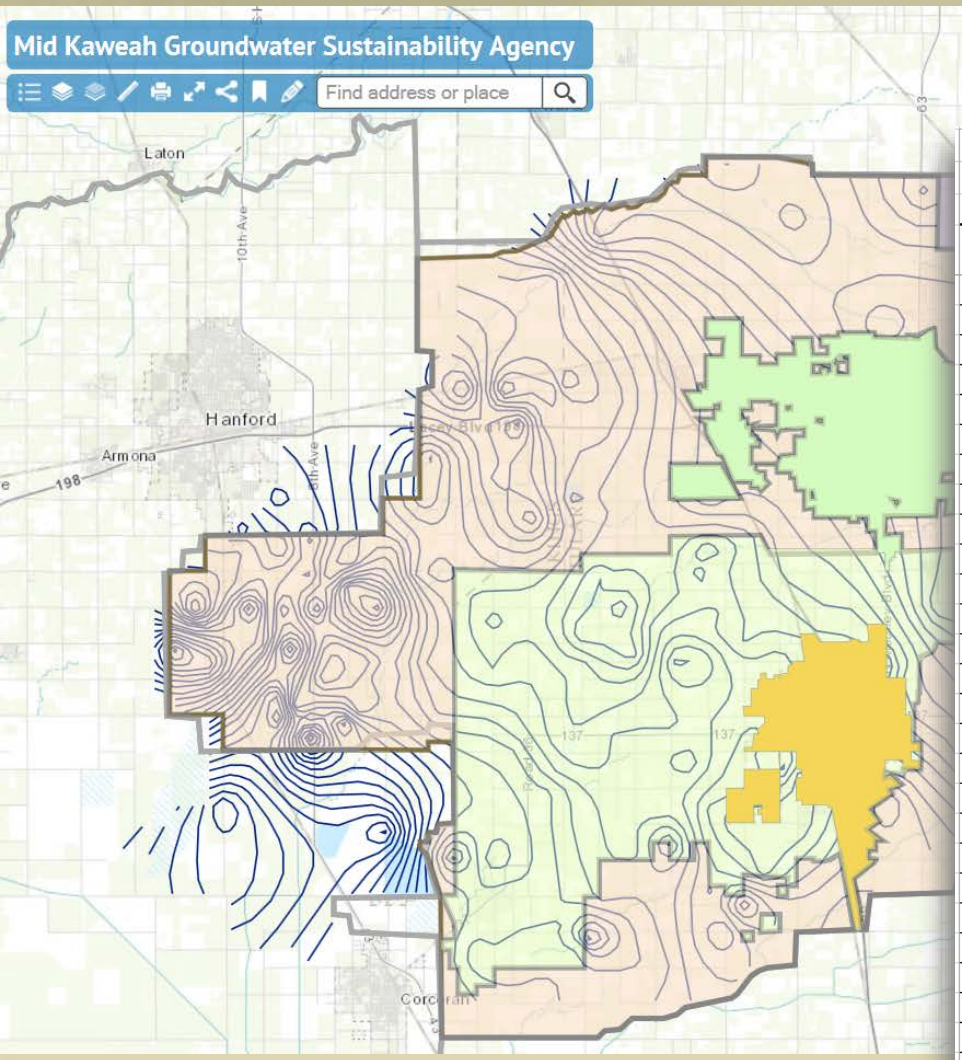
Questions/Comments



Estimated Total Groundwater Pumpage (in acre-feet per year)

Calendar Year	Hydrologic Unit No. I	Hydrologic Unit No. II	Hydrologic Unit No. III	Hydrologic Unit No. IV	Hydrologic Unit No. V	Hydrologic Unit No. VI	District Net
1981	24,888	101,946	78,347	157,689	165,251	203,664	**731,786**
1982	19,830	46,555	51,638	71,046	62,622	143,205	**394,896**
1983	21,685	48,256	48,979	109,660	154,217	130,431	**513,227**
1984	31,299	102,835	86,485	167,637	162,034	190,214	**740,505**
1985	28,385	88,081	81,846	154,208	166,765	197,627	**716,912**
1986	24,317	56,233	65,967	100,514	50,430	143,957	**441,418**
1987	28,976	101,340	84,112	170,276	213,750	196,832	**795,286**
1988	30,565	104,090	83,527	174,834	166,172	199,701	**758,889**
1989	29,506	94,970	84,091	168,596	192,579	204,495	**774,237**
1990	31,941	109,133	88,980	193,126	234,956	222,817	**880,954**
1991	32,290	90,613	84,024	162,994	174,059	193,512	**737,492**
1992	31,095	98,014	85,189	172,725	193,996	199,846	**780,866**
1993	28,126	54,855	72,095	105,417	46,447	129,471	**436,411**
1994	30,354	92,458	83,545	171,449	179,863	197,420	**755,089**
1995	18,204	30,133	62,838	64,367	62,527	108,537	**346,606**
1996	28,930	64,588	77,242	108,687	69,661	137,744	**486,852**
1997	30,761	71,807	78,556	113,128	104,804	151,957	**551,015**
1998	17,572	13,915	47,706	46,245	34,599	92,894	**252,931**
1999	30,977	80,895	75,717	136,598	103,095	162,204	**589,485**
2000	25,047	88,487	88,858	143,628	137,467	179,953	**663,440**
2001	26,747	108,633	95,350	160,773	201,843	204,055	**797,401**
2002	27,898	108,073	96,474	177,249	213,029	216,989	**839,712**
2003	26,799	109,032	96,083	154,162	170,849	187,474	**744,399**
2004	24,526	114,120	97,760	172,460	217,485	215,594	**841,946**
2005	22,608	62,972	79,774	90,178	58,056	149,783	**463,371**
2006	23,033	75,844	80,108	106,587	110,163	164,017	**559,753**