

CITY OF SPOKANE VALLEY

Request for Council Action

Meeting Date: March 29, 2016

Department Director Approval:

Check all that apply: consent old business new business public hearing
 information admin. report pending legislation executive session

AGENDA ITEM TITLE: Comprehensive Plan Update specific to water rights and water districts.

GOVERNING LEGISLATION: RCW 36.70.A (Growth Management)

PREVIOUS COUNCIL ACTION TAKEN: None

BACKGROUND: As part of the City's Comprehensive Plan Update, staff reviewed the City's inventory of water supply services. This presentation reviews pertinent water district data and includes district size (population and acreage), water consumption, water rights and land capacity.

Staff has prepared a power point presentation that covers all the water districts and how they relate to each other. Also provided is a supplemental informational packet that has a one-page breakdown for each water district.

OPTIONS: N/A

RECOMMENDED ACTION OR MOTION: N/A

BUDGET/FINANCIAL IMPACTS: None

STAFF CONTACT: Henry Allen, Development Engineer
Adam Jackson, Assistant Engineer

ATTACHMENTS: PowerPoint Presentation
Supplemental Packet: 1-page district breakdown sheets for each district.



Informational Review: Water Purveyors of Spokane Valley

March 29, 2016

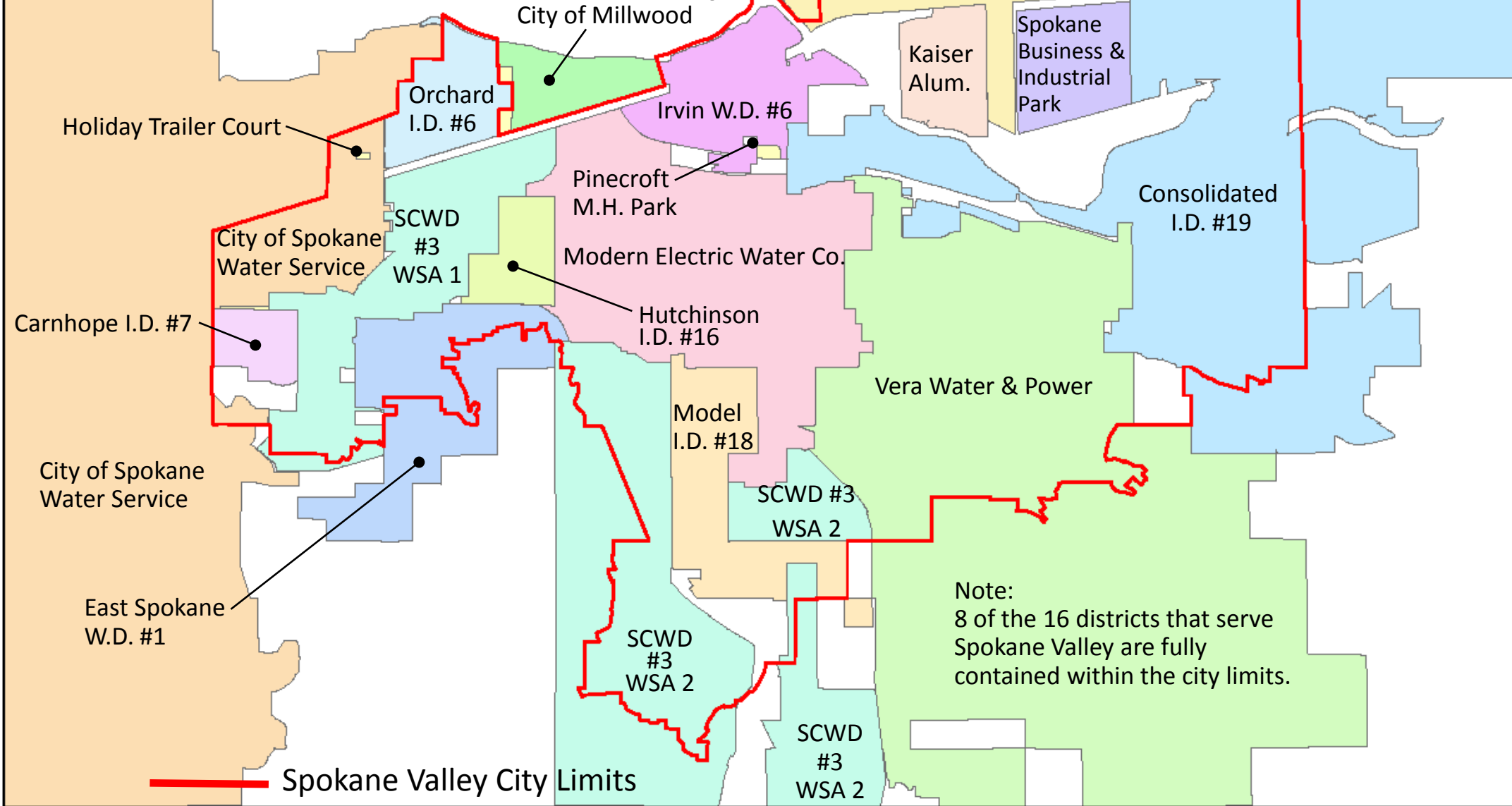
COMMUNITY & ECONOMIC DEVELOPMENT

The Water Districts (16 Total)



- Carnhope Irrigation District #7
- City of Spokane Water Service
- Consolidated Irrigation District #19
- East Spokane Water District #1
- Holiday Trailer Court
- Hutchinson Irrigation District #16
- Irvin Water District #6
- Kaiser Aluminum - Trentwood
- Model Irrigation District #18
- Modern Electric Water Company
- Orchard Avenue Irrigation District #6
- Pinecroft Mobile Home Park
- Spokane Business & Industrial Park
- Spokane County Water District #3 (WSA 1 & 2)
- Trentwood Irrigation District #3
- Vera Water & Power

Spokane Valley Water Districts Map





Residential Service Population

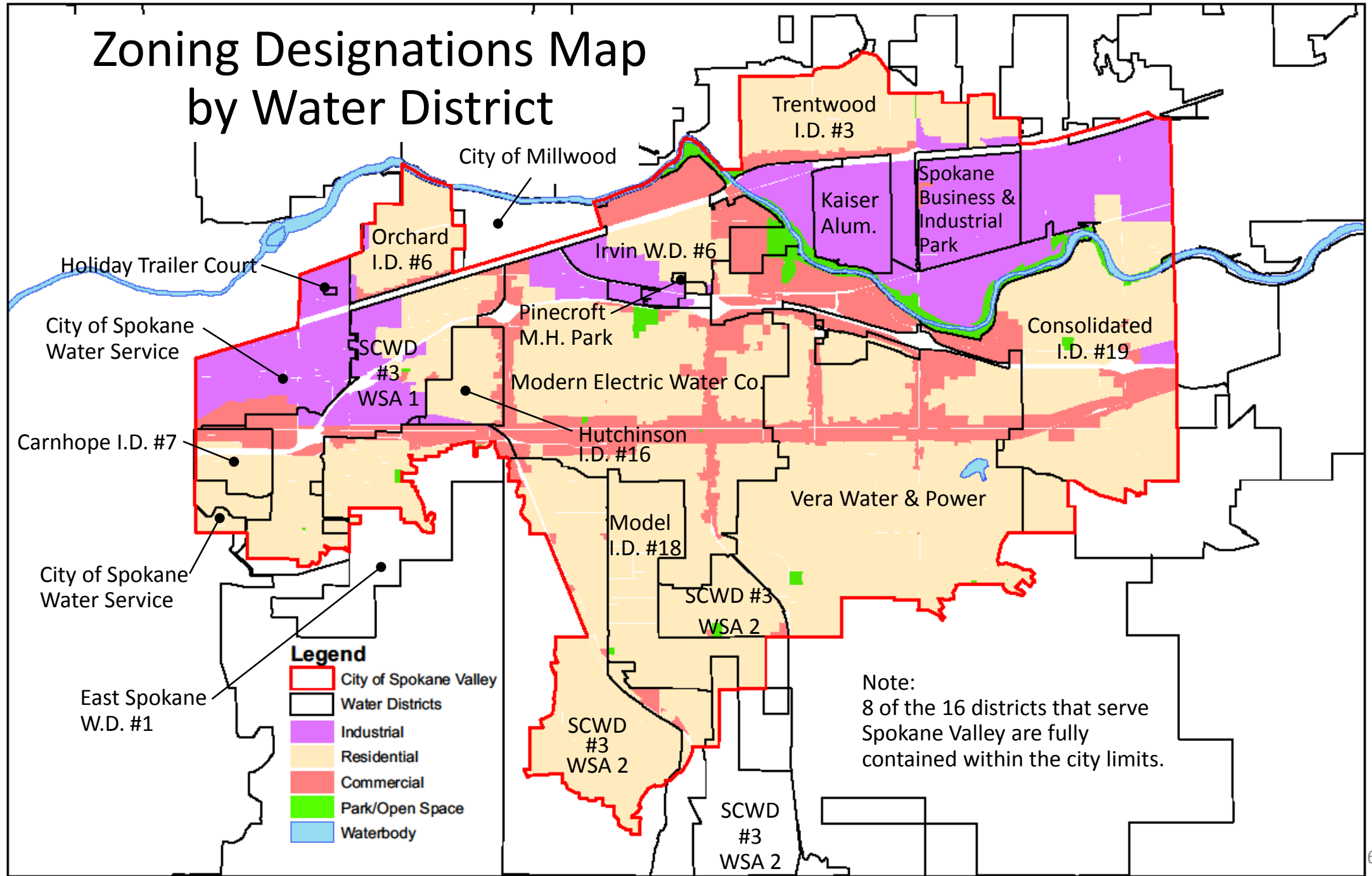
City of Spokane Water Service	227,505	Orchard Avenue I.D. #6	2,983
Vera Water & Power	24,962	Hutchinson I.D #16	2,180
Consolidated I.D. #19	22,315	Carnhope I.D. #7	1,750
Modern Electric Water Company	18,560	Pinecroft Mobile Home Park	248
Spokane County W.D. #3 (WSA #1 & #2)	17,095	Holiday Trailer Court	12
Model I.D. #18	6,067	Kaiser Aluminum - Trentwood	0
Trentwood I.D. #3	4,188	Spokane Business & Ind. Park	0
Irvin W.D. #6	4,084	TOTALS (Incl. City of Spokane)	335,999
East Spokane W.D. #1	4,050	TOTALS (Excl. City of Spokane)	108,494
		2015 OFM COSV Population Est.:	93,340



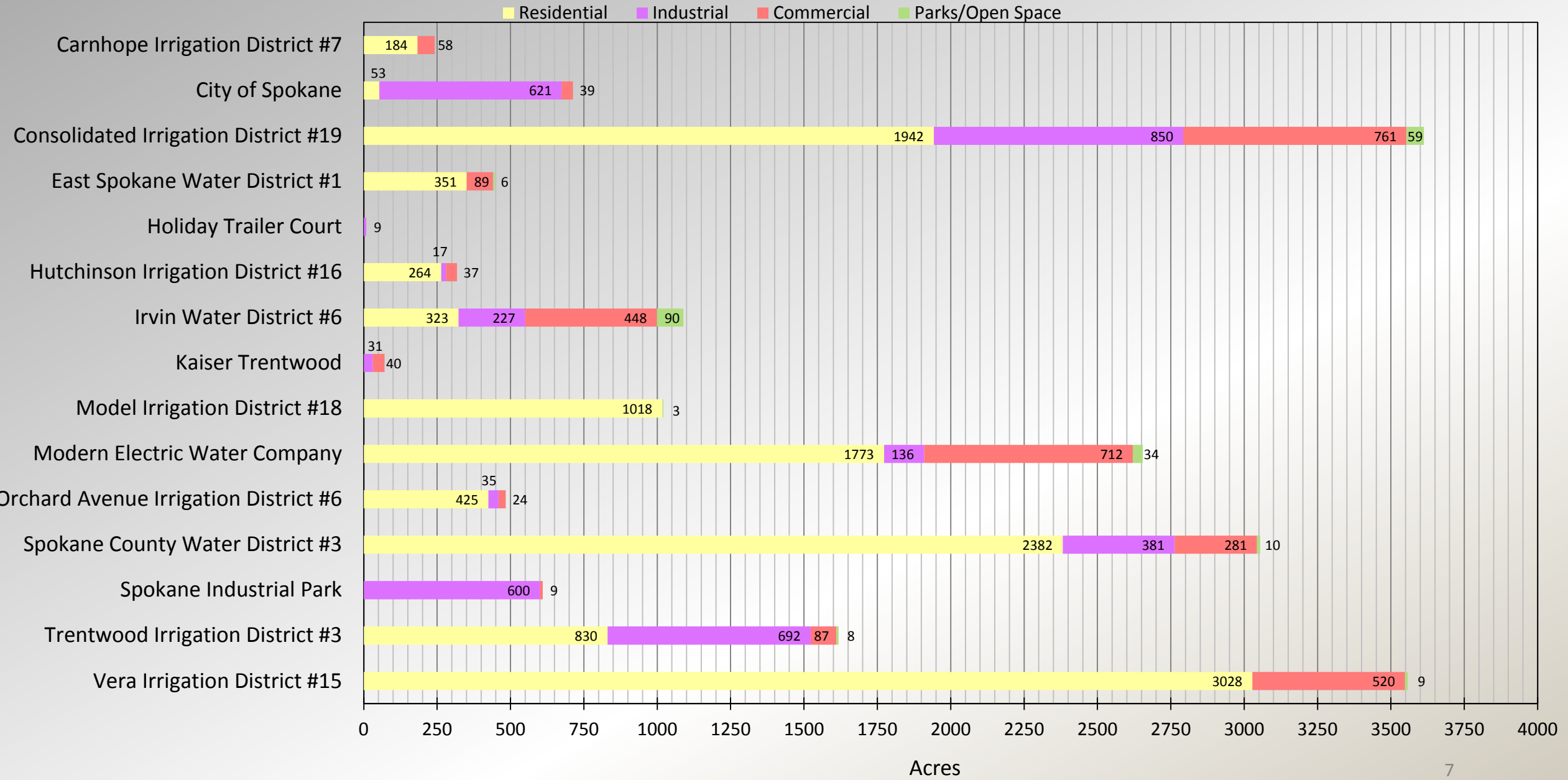
Area Within City Limits (By Acres)

Water District Name	Area In City Limits	Total Service Area	% In City Limits	Water District Name	Acres In City Limits	Total Acres	% In City Limits
Consolidated I.D. #19	4,132	12,433	33%	East Spokane W.D. #1	602	1,443	42%
Vera W & P	3,949	10,586	37%	Orchard Ave. I.D. #6	555	563	99%
SCWD #3 (WSA 1 & 2)	3,641	6,056	60%	Kaiser Aluminum	491	491	100%
Modern EWCo.	3,309	3,309	100%	Hutchinson I.D. #16	371	371	100%
Trentwood I.D. #3	1,263	1,978	64%	Carnhope I.D. #7	277	277	100%
Model I.D. #18	1,011	1,050	96%	Pinecroft MH Park	15	15	100%
City of Spokane	960	48,220	2%	Holiday Trailer Ct.	5	5	100%
Irvin W.D. #6	949	949	100%	Totals (Incl. Spokane)	22,154	88,370	25%
Spokane B & I Park	625	625	100%	Totals (Excl. Spokane)	21,194	40,150	53%

Zoning Designations Map by Water District



Water District Zoning Designations Within City Limits (By Acres)



Monthly Residential Water Rate Comparison

Assumes 1 residence consumes 25,000 gallons per month



City of Spokane (Service to COSV)	\$58.65	Modern Electric Water Company	\$22.80
East Spokane W.D. #1	\$43.75	Vera Water & Power	\$20.13
Carnhope I.D. #7	\$35.33	Irvin W.D. #6	\$18.19
Orchard Avenue I.D. #6	\$35.29	Median	\$27.00
Trentwood I.D. #3	\$29.28	Average	\$30.51
Spokane County W.D. #3 (WSA #1 & #2)	\$27.01		
Hutchinson I.D #16	\$27.00	Holiday Trailer Court	No Charge
Model I.D. #18	\$25.68	Kaiser Aluminum - Trentwood	No Charge
Consolidated I.D. #19	\$23.00	Spokane BIP and Pinecroft MH Park are not available.	

Annual Water Right Capacity



Water District Name	2014 Water Pumped (Ac-Ft)	Water Right (Ac-Ft)	% Water Right Used	Water District Name	2014 Water Pumped (Ac-Ft)	Water Right (Ac-Ft)	% Water Right Used
Vera W & P	10,466	10,446	100%	City of Spokane	65,077	147,570	44%
SCWD #3 (WSA 1 & 2)	5,469	6,456	85%	Trentwood I.D. #3	1,552	5,420	29%
Irvin W.D. #6	1,391	1,768	79%	Modern EWCo.	6,301	29,061	22%
Consolidated I.D. #19	13,892	22,410	62%	Totals (Incl. Spokane)	110,302	235,303	47%
East Spokane W.D. #1	872	1,536	57%	Totals (Excl. Spokane)	45,225	87,733	52%
Model I.D. #18	2,202	4,115	54%				
Hutchinson I.D. #16	1,086	2,210	49%	Spokane B & I Park	-	7,582	-
Orchard Ave. I.D. #6	1,479	3,161	47%	Kaiser Aluminum	-	22,644	-
Carnhope I.D. #7	515	1,150	45%	Holiday Trailer Ct. and Pinecroft MH Park are not available.			

City Land Capacity vs. Water Rights: Residential Zoning Designations Only



Water District	LQA Capacity for New Connections	% Land Capacity Used	% Water Right Used	Water District	LQA Capacity for New Connections	% Land Capacity Used	% Water Right Used
Vera W & P	1,400	87%	100%	Carnhope I.D. #7	45	92%	45%
SCWD #3	654	91%	85%	City of Spokane	12	N/A	44%
Irvin W.D. #6	306	87%	79%	Trentwood I.D. #3	466	75%	29%
Consolidated I.D. #19	1,650	83%	62%	Modern EWCo.	1,073	87%	22%
East Spokane W.D. #1	166	91%	57%	TOTALS	6,012	88%	52%*
Model I.D. #18	112	96%	54%	(*Ex. W.R. Capacity % excludes City of Spokane)			
Hutchinson I.D. #16	88	90%	49%	DOH does not allow SBIP, Kaiser, Holiday nor Pinecroft to add any new connections; they are excluded.			
Orchard Ave. I.D. #6	40	97%	47%				



QUESTIONS?

Carnhope Irrigation District #7



DOH Water System ID:	11250	Inaugural Year:	1921
DOH Residential Service Population:	1,750	Water System Plan Year:	2008

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	277	Single Family:	383
Total Service Area:	277	Multi-Family:	68
Percentage of Area in City limits:	100%	Commercial/Industrial:	35
		DOH Total Service Connections:	486

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	515
DOE Annual Water Right Allotment (ac-ft):	1,150
% of Water Right Consumed by District:	45%

1 Equivalent Residential Unit (gal/day) 802 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	451	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	45	(assume full build-out per ex. zoning)
Max. Number of R- and MF- Connections:	496	Capacity for Addt'l Pop. Growth (ppl): 112
Ex. Connections as % of Maximum Capacity:	91%	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements

Distribution System Leakage (DSL) is high. Ongoing replacement/upgrading of all service meters (on 10-yr cycles) and in-need areas of the distribution system. Replace 2-port hydrants with 3-port hydrants.

Existing System Components

2 well pump stations, 0 reservoirs, 7 miles of water lines

Monthly Cost for 25,000 Gallons of Water	\$ 35.33	Distribution System Leakage-DSL:	43.6%
Rate Schedule Type: Declining block rate		(value is a 3-yr running average)	

City of Spokane Water Service



DOH Water System ID:	83100K	Inaugural Year:	1883
DOH Residential Service Population:	227,505	Water System Plan Year:	2013

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	960	Single Family (602 within COSV):	70,078
Total Service Area:	48220	Multi-Family:	4,267
Percentage of Area in City limits:	2%	Commercial/Industrial:	10,906
		DOH Total Service Connections:	85,251

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2013
Total Water Pumped by District (ac-ft):	65,077
DOE Annual Water Right Allotment (ac-ft):	147,570
% of Water Right Consumed by District:	44%

1 Equivalent Residential Unit (gal/day) 359 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	602 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	12
Max. Number of R- and MF- Connections:	614
Ex. Connections as % of Maximum Capacity:	98%
Capacity for Addt'l Pop. Growth (ppl): 31 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details	
System Deficiencies/Captial Improvements	Existing System Components
Aging infrastructure and demand growth creates the need to rehabilitate/replace wells, pump houses, and reservoirs. New growth requires new reservoirs and pump houses to serve new areas. Also, aging water lines conintually need replaced.	7 well stations, 14 wells, 27 well pumps, 25 booster pump stations, 72 booster pumps, 34 reservoirs, and >1,000 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 58.65	Distribution System Leakage-DSL:	18.5%
Rate Schedule Type: Inclining block rate		(value is a 3-yr running average)	

Consolidated Irrigation District #19



10220 &

DOH Water System ID:	10221	Inaugural Year:	1966
DOH Residential Service Population:	22,315	Water System Plan Year:	2009

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	4,132	Single Family:	7,921
Total Service Area:	12,433	Multi-Family:	1,468
Percentage of Area in City limits:	33%	Commercial/Industrial:	220
		DOH Total Service Connections:	9,609

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	13,892
DOE Annual Water Right Allotment (ac-ft):	22,410
% of Water Right Consumed by District:	62%

1 Equivalent Residential Unit (gal/day) 1,449 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	9,389 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	1,650
Max. Number of R- and MF- Connections:	11,039
Ex. Connections as % of Maximum Capacity:	85%
Capacity for Add'l Pop. Growth (ppl): 3,965 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details

System Deficiencies/Captial Improvements
 "North" system is not treated for disinfection. Some reservoirs may not be able to meet future demand. Ongoing upsizing of mainlines req'd. New pressure zones to improve system. Rehab wells and provide backup power for emergency/redundancy.

Existing System Components
 34 wells at 11 well sites, 8 pressure zones, 15 reservoirs, 3 booster stations, and 168 miles of water mains.

Monthly Cost for 25,000 Gallons of Water	\$ 23.00	Distribution System Leakage-DSL:	15.9%
Rate Schedule Type: Decl. (Summer) & Incl. (Winter)		(value is a 3-yr running average)	

East Spokane Water District #1



DOH Water System ID:	216506	Inaugural Year:	1917
DOH Residential Service Population:	4,050	Water System Plan Year:	2007

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	602	Single Family:	1,176
Total Service Area:	1,443	Multi-Family:	381
Percentage of Area in City limits:	42%	Commercial/Industrial:	102
		DOH Total Service Connections:	1,659

Total Water Pumped vs. Water Rights Allotment		
Calendar Year for Pumped Volume Below:	2014	
Total Water Pumped by District (ac-ft):	872	Notes: Water pumped excludes 42 ac-ft purchased from SCWD #3 via intertie. 1,536 ac-ft includes 500 ac-ft of water taken from MEWCo via intertie agreement.
DOE Annual Water Right Allotment (ac-ft):	1,536	
% of Water Right Consumed by District:	57%	

1 Equivalent Residential Unit (gal/day) 560 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits		
(Data per <i>Land Quantity Analysis Methodology for Spokane County (LQA)</i>)		
Ex. Number of R- and MF- Connections:	1,557	
Capacity for Additional Dwelling Units:	166	(1 dwelling unit (DU) = 1 connection)
Max. Number of R- and MF- Connections:	1,723	Capacity for Addt'l Pop. Growth (ppl): 340
Ex. Connections as % of Maximum Capacity:	90%	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements
Storage capacity is a limiting factor in order to meet growth demands. Booster pump upgrades, along with a new intertie with Modern, is proposed to help alleviate pumping demand on the system and its water rights. Also, ongoing mainline replacement is required.

Existing System Components
7 wells with 9 pumps, 5 pressure zones with 4 booster stations, 3 reservoirs. Length of mainlines not available.

Monthly Cost for 25,000 Gallons of Water	\$ 43.75	Distribution System Leakage-DSL:	24.2%
Rate Schedule Type: Flat Overage rate		(value is a 3-yr running average)	

Holiday Trailer Court



DOH Water System ID:	33679H	Inaugural Year:	1970
DOH Residential Service Population:	12	Water System Plan Year:	

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	5	Single Family:	7
Total Service Area:	5	Multi-Family:	-
Percentage of Area in City limits:	100%	Commercial/Industrial:	-
		DOH Total Service Connections:	7

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	-
Total Water Pumped by District (ac-ft):	-
DOE Annual Water Right Allotment (ac-ft):	-
% of Water Right Consumed by District:	-

DOH DOES NOT REQUIRE FILES TO BE ON-FILE FOR WATER SYSTEMS THAT DO NOT PLAN ON GROWING. CONSUMPTION DATA IS NOT AVAILABLE.

1 Equivalent Residential Unit (gal/day) - (no Water System Plan, no data on file)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	7 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	-
Max. Number of R- and MF- Connections:	7
Ex. Connections as % of Maximum Capacity:	100%

Capacity for Addt'l Pop. Growth (ppl): 0
(based on LQA ratio for DUs to ppl)

System Infrastructure Details	
System Notes:	Existing System Components
This is a residential well from 1960s or 1970s that has been split to provide service to 6 mobile homes in addition to the original house. The owner of the well does not charge the residents any consumption charge. There is no available consumption or allotment data.	1 well only (unmetered)

Monthly Cost for 25,000 Gallons of Water	No Charge	Distribution System Leakage-DSL:	N/A
Rate Schedule Type:	N/A	(value is a 3-yr running average)	

Hutchinson Irrigation District #16



DOH Water System ID:	35100J	Inaugural Year:	1909
DOH Residential Service Population:	2,180	Water System Plan Year:	2009

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	371	Single Family:	763
Total Service Area:	371	Multi-Family:	109
Percentage of Area in City limits:	100%	Commercial/Industrial:	17
			DOH Total Service Connections:
			889

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	1,086
DOE Annual Water Right Allotment (ac-ft):	2,210
% of Water Right Consumed by District:	49%

1 Equivalent Residential Unit (gal/day) 754 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	872 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	88
Max. Number of R- and MF- Connections:	960
Ex. Connections as % of Maximum Capacity:	91%
Capacity for Addt'l Pop. Growth (ppl): 219 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details	
System Deficiencies/Captial Improvements	Existing System Components
Portions of distribution system are old and undersized and need replaced. Ongoing service meter replacement (on 10-year cycles). These improvements should help with system loss (leakage).	2 wells with 4 well pumps, 1 reservoir, and 12 miles of water mains.

Monthly Cost for 25,000 Gallons of Water	\$ 27.00	Distribution System Leakage-DSL:	45.8%
Rate Schedule Type: Flat Overage rate		(value is a 3-yr running average)	



Irvin Water District #6

DOH Water System ID:	36050	Inaugural Year:	1927
DOH Residential Service Population:	4,084	Water System Plan Year:	2015

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	949	Single Family:	824
Total Service Area:	949	Multi-Family:	1,038
Percentage of Area in City limits:	100%	Commercial/Industrial:	164
		DOH Total Service Connections:	2,026

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	1,391
DOE Annual Water Right Allotment (ac-ft):	1,768
% of Water Right Consumed by District:	79%

1 Equivalent Residential Unit (gal/day) 449 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	1,862 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	306
Max. Number of R- and MF- Connections:	2,168
Ex. Connections as % of Maximum Capacity:	86%
Capacity for Addt'l Pop. Growth (ppl): 615 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details

System Deficiencies/Captial Improvements
 Ongoing maintenance of system facilities. Long term upgrades and expansion to the distribution system is required for growth. A new office building and/or storage building is long term goal.

Existing System Components
 4 well pump stations and 2 reservoirs with 23 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 18.19	Distribution System Leakage-DSL:	9.8%
Rate Schedule Type: Flat Overage rate		(value is a 3-yr running average)	

Kaiser Aluminum - Trentwood



DOH Water System ID:	37450B	Inaugural Year:	-
DOH Non-Residential Service Pop.:	804	Water System Plan Year:	-

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	491	Single Family:	-
Total Service Area:	491	Multi-Family:	-
Percentage of Area in City limits:	100%	Commercial/Industrial:	5
		DOH Total Service Connections:	5

Total Water Pumped vs. Water Rights Allotment		
Calendar Year for Pumped Volume Below:	2015	DOH DOES NOT REQUIRE FILES TO BE ON-HAND FOR WATER SYSTEMS THAT DO NOT PLAN ON GROWING.
Total Water Pumped by District (ac-ft):	6,539	
DOE Annual Water Right Allotment (ac-ft):	22,644	
% of Water Right Consumed by District:	29%	

1 Equivalent Residential Unit (gal/day) - (no residential uses exist in this district)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	-	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	-	
Max. Number of R- and MF- Connections:	-	Capacity for Addt'l Pop. Growth (ppl): 0 (based on LQA ratio for DUs to ppl)
Ex. Connections as % of Maximum Capacity:	-	

System Infrastructure Details

System Deficiencies/Captial Improvements	Existing System Components
Ongoing repair and rehabilitation of pumps and water lines.	2 active wells (and 1 inactive well) serving 2,100 LF of water lines. NOTE: Water rights are divided for two uses: 324 ac-ft for domestic use and 22,320 ac-ft for industrial use.

Monthly Cost for 25,000 Gallons of Water	No Charge	Distribution System Leakage-DSL:	N/A
Rate Schedule Type:	N/A	(value is a 3-yr running average)	

Model Irrigation District #18



DOH Water System ID:	55550D	Inaugural Year:	1910
DOH Residential Service Population:	6,067	Water System Plan Year:	2011

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	1,011	Single Family:	2,286
Total Service Area:	1,050	Multi-Family:	240
Percentage of Area in City limits:	96%	Commercial/Industrial:	6
		DOH Total Service Connections:	2,532

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	2,202
DOE Annual Water Right Allotment (ac-ft):	4,115
% of Water Right Consumed by District:	54%

1 Equivalent Residential Unit (gal/day) 631 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	2,526	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	112	
Max. Number of R- and MF- Connections:	2,638	Capacity for Addt'l Pop. Growth (ppl): 251
Ex. Connections as % of Maximum Capacity:	96%	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements

8 miles of system piping to be replaced over the next 20 years: budgeted >\$100,000 on mainline replacement annually. Reservoir capacity is below DOH standard: automatic emergency intertie is available and additional pump capacity is available to meet high flow demands.

Existing System Components

6 wells with 1 booster pump station, 2 reservoirs and 36 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 25.68	Distribution System Leakage-DSL:	4.3%
Rate Schedule Type: Inclining block rate		(value is a 3-yr running average)	

Modern Electric Water Company



DOH Water System ID:	556008	Inaugural Year:	1905
DOH Residential Service Population:	18,560	Water System Plan Year:	2013

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	3,309	Single Family:	4,087
Total Service Area:	3,309	Multi-Family:	3,351
Percentage of Area in City limits:	100%	Commercial/Industrial:	824
		DOH Total Service Connections:	8,262

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2015
Total Water Pumped by District (ac-ft):	6,301
DOE Annual Water Right Allotment (ac-ft):	29,061
% of Water Right Consumed by District:	22%

1 Equivalent Residential Unit (gal/day) 531 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	7,438	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	1,073	
Max. Number of R- and MF- Connections:	8,511	Capacity for Addt'l Pop. Growth (ppl): 2,324
Ex. Connections as % of Maximum Capacity:	87%	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements

Replace 1 well, rehabilitate 1 well, improve various sections of the distribution system to meet fire and peak demand flows. Ongoing meter and distribution network repair/replacement is also required.

Existing System Components

11 wells at 8 different well sites, 2 pressure reducing valves for the 2 pressure zones, 3 reservoirs, and 100 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 22.80	Distribution System Leakage-DSL:	8.0%
Rate Schedule Type: Flat Overage rate		(value is a 3-yr running average)	

Orchard Avenue Irrigation District #6



DOH Water System ID:	64000 E	Inaugural Year:	1920s
DOH Residential Service Population:	2,983	Water System Plan Year:	2015

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	555	Single Family:	1,237
Total Service Area:	563	Multi-Family:	18
Percentage of Area in City limits:	99%	Commercial/Industrial:	4
		DOH Total Service Connections:	1,259

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	1,479
DOE Annual Water Right Allotment (ac-ft):	3,161
% of Water Right Consumed by District:	47%

1 Equivalent Residential Unit (gal/day) 483 (taken from Water System Plan)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	1,255	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	40	
Max. Number of R- and MF- Connections:	1,295	Capacity for Addt'l Pop. Growth (ppl): 100
Ex. Connections as % of Maximum Capacity:	97%	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements

The system operates with little redundancy due to only 2 wells and no storage tanks. 25% of the distribution system has leak-issues and consists of cast-iron pipe that needs replaced. About 200 service meters need removed from basements and replaced at property lines.

Existing System Components

2 wells with 5 well pumps that serve 1 pressure zone. There are 0 reservoirs and roughly 21 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 35.29	Distribution System Leakage-DSL:	13.4%
Rate Schedule Type: Flat Overage rate		(value is a 3-yr running average)	

Pinecroft Mobile Park



DOH Water System ID:	67623 F	Inaugural Year:	1970
DOH Residential Service Pop.:	248	Water System Plan Year:	N/A

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	15	Single Family:	139
Total Service Area:	15	Multi-Family:	-
Percentage of Area in City limits:	100%	Commercial/Industrial:	-
		DOH Total Service Connections:	139

Total Water Pumped vs. Water Rights Allotment

Calendar Year for Pumped Volume Below:	-	DOH DOES NOT REQUIRE FILES TO BE ON-FILE FOR WATER SYSTEMS THAT DO NOT PLAN ON GROWING. CONSUMPTION DATA IS NOT AVAILABLE.
Total Water Pumped by District (ac-ft):	-	
DOE Annual Water Right Allotment (ac-ft):	-	
% of Water Right Consumed by District:	-	

1 Equivalent Residential Unit (gal/day) - (no Water System Plan, no data on file)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits

(Data per *Land Quantity Analysis Methodology for Spokane County (LQA)*)

Ex. Number of R- and MF- Connections:	139	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	-	
Max. Number of R- and MF- Connections:	139	Capacity for Addt'l Pop. Growth (ppl): 0 (based on LQA ratio for DUs to ppl)
Ex. Connections as % of Maximum Capacity:	100%	

System Infrastructure Details

System Deficiencies/Captial Improvements	Existing System Components
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Monthly Cost for 25,000 Gallons of Water	\$ -	Distribution System Leakage-DSL:	-
Rate Schedule Type:		(value is a 3-yr running average)	

Spokane Business and Industrial Park



DOH Water System ID:	83027K	Inaugural Year:	1942
DOH Non-Residential Service Pop.:	3,500	Water System Plan Year:	1989

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	625	Single Family:	-
Total Service Area:	625	Multi-Family:	-
Percentage of Area in City limits:	100%	Commercial/Industrial:	252
		DOH Total Service Connections:	252

Total Water Pumped vs. Water Rights Allotment		
Calendar Year for Pumped Volume Below:	-	DOH DOES NOT REQUIRE FILES TO BE ON-HAND FOR WATER SYSTEMS THAT DO NOT PLAN ON GROWING. CONSUMPTION DATA IS NOT AVAILABLE.
Total Water Pumped by District (ac-ft):	-	
DOE Annual Water Right Allotment (ac-ft):	7,582	
% of Water Right Consumed by District:	-	

1 Equivalent Residential Unit (gal/day) - (no Water System Plan, no data on file)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits		
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>		
Ex. Number of R- and MF- Connections:	-	(1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	-	
Max. Number of R- and MF- Connections:	-	Capacity for Addt'l Pop. Growth (ppl): 0
Ex. Connections as % of Maximum Capacity:	-	(based on LQA ratio for DUs to ppl)

System Infrastructure Details

System Deficiencies/Captial Improvements	Existing System Components
	Per 1989 WSP on file at DOH: 4 wells, 2 reservoirs and 11 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ -	Distribution System Leakage-DSL:	-
Rate Schedule Type:		(value is a 3-yr running average)	

Spokane County Water District #3 (WSA 1 + 2)



93350 &

DOH Water System ID:	93351	Inaugural Year:	1986
DOH Residential Service Population:	17,095	Water System Plan Year:	2011

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	3,641	Single Family:	4,852
Total Service Area:	6,056	Multi-Family:	1,986
Percentage of Area in City limits:	60%	Commercial/Industrial:	318
		DOH Total Service Connections:	7,156

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	5,469
DOE Annual Water Right Allotment (ac-ft):	6,456
% of Water Right Consumed by District:	85%

(Water pumped excludes 42 ac-ft sold to ESWD #1 via intertie - this is rare.)

1 Equivalent Residential Unit (gal/day) 611 (taken as weighted average of WSA 1 + 2)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	6,838
Capacity for Additional Dwelling Units:	654
Max. Number of R- and MF- Connections:	7,492
Ex. Connections as % of Maximum Capacity:	91%

(1 dwelling unit (DU) = 1 connection)

Capacity for Addt'l Pop. Growth (ppl):	1,491
(based on LQA ratio for DUs to ppl)	

System Infrastructure Details

System Deficiencies/Captial Improvements
 Ongoing transmission line replacement, providing an intertie between Water Service Areas 1 and 2, upgrade WSA #1 well pump, raplace WSA #2 reservoir and booster pump. To accommodate growth, 2 new reservoirs and 3 new booster stations are required.

Existing System Components
 8 active wells (4 unactive wells also owned by district) with 6 pump stations and 16 pumps, 6 reservoirs and roughly 200 miles of water lines system wide.

Monthly Cost for 25,000 Gallons of Water	\$ 27.01	Distribution System Leakage-DSL:	9.8%
Rate Schedule Type: Inclining block rate		WSA #1: 14.4%	WSA #2: 7.3%

Trentwood Irrigation District #3



DOH Water System ID:	89250 C	Inaugural Year:	1918
DOH Residential Service Population:	4,188	Water System Plan Year:	2009

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	1,263	Single Family:	1,460
Total Service Area:	1,978	Multi-Family:	267
Percentage of Area in City limits:	64%	Commercial/Industrial:	162
		DOH Total Service Connections:	1,889

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	1,552
DOE Annual Water Right Allotment (ac-ft):	5,420
% of Water Right Consumed by District:	29%
1 Equivalent Residential Unit (gal/day)	421

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	1,727 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	466
Max. Number of R- and MF- Connections:	2,193
Ex. Connections as % of Maximum Capacity:	79%
Capacity for Addt'l Pop. Growth (ppl): 1,161 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details	
System Deficiencies/Captial Improvements	Existing System Components
No treatment is provided at the well sources, and ongoing system mainline replacement is required.	4 well pump stations, 3 booster stations, 3 pressure zones, 4 reservoirs, 2 emergency back up wells, and 35 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 29.28	Distribution System Leakage-DSL:	13.8%
Rate Schedule Type: Flat Overage rate		(value is approx. & based on 4 year values)	



Vera Water & Power

DOH Water System ID:	914505	Inaugural Year:	1908
DOH Residential Service Population:	24,962	Water System Plan Year:	2015

Service Area Size (in Acres)		DOH Service Connections:	
Area within City limits:	3,949	Single Family:	7,121
Total Service Area:	10,586	Multi-Family:	2,874
Percentage of Area in City limits:	37%	Commercial/Industrial:	408
		DOH Total Service Connections:	10,403

Total Water Pumped vs. Water Rights Allotment	
Calendar Year for Pumped Volume Below:	2014
Total Water Pumped by District (ac-ft):	10,466
DOE Annual Water Right Allotment (ac-ft):	10,446
% of Water Right Consumed by District:	100%

1 Equivalent Residential Unit (gal/day) 711 (taken as weighted average of WSA 1 + 2)

Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits	
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>	
Ex. Number of R- and MF- Connections:	9,995 (1 dwelling unit (DU) = 1 connection)
Capacity for Additional Dwelling Units:	1,400
Max. Number of R- and MF- Connections:	11,395
Ex. Connections as % of Maximum Capacity:	88%
Capacity for Addt'l Pop. Growth (ppl): 3,328 (based on LQA ratio for DUs to ppl)	

System Infrastructure Details

System Deficiencies/Captial Improvements
 Various areas of main line need upsized. An overflow collection & piping sytem project for the 4 MG reservoir is proposed.

Existing System Components
 9 wells with 6 booster stations and 5 reservoirs, along with 145 miles of water lines.

Monthly Cost for 25,000 Gallons of Water	\$ 20.13	Distribution System Leakage-DSL:	12.2%
Rate Schedule Type: Declining Block rate		(value is a 3-yr running average)	

All Water Districts Serving Spokane Valley



DOH Water System ID:	-	Inaugural Year:	-
Residential Service Pop. (Excl. Spokane):	108,494	Water System Plan Year:	-

Service Area Size (Acres, Excl. City of Spokane)		DOH Service Connections:	
Area within City limits:	21,194	Single Family (Incl. 602 Spokane):	32,858
Total Service Area:	40,150	Multi-Family:	11,800
Percentage of Area in City limits:	53%	Commercial/Industrial:	2,517
		DOH Total Service Connections:	47,175

Total Water Pumped vs. Water Rights Allotment			
Calendar Year for Pumped Volume Below:	-		
Total Water Pumped by District (ac-ft):	45,225	Total Water Pumped vs. Water Rights Allotment -	
DOE Annual Water Right Allotment (ac-ft):	87,733	Excludes:	
% of Water Right Consumed by All Districts:	52%	COS, SBIP, Kaiser, Pinecroft, & Holiday	

1 Equivalent Residential Unit (gal/day)	870	(Weighted average of reporting districts-excludes COS, Kaiser, SBIP, Pinecroft, Holiday)
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Land Capacity Based on Existing R- and MF- Zoning Designations Within COSV Limits			
<i>(Data per Land Quantity Analysis Methodology for Spokane County (LQA))</i>			
Ex. Number of R- and MF- Connections:	44,658	(1 dwelling unit (DU) = 1 connection)	
Capacity for Additional Dwelling Units:	6,012		
Max. Number of R- and MF- Connections:	50,670	Capacity for Addt'l Pop. Growth (ppl): 13,937	
Ex. Connections as % of Maximum Capacity:	88%	(based on LQA ratio for DUs to ppl)	

System Infrastructure Details

System Deficiencies/Captial Improvements	Existing System Components
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Monthly Cost for 25,000 Gallons of Water	\$ 30.51	Distribution System Leakage-DSL:	13.5%
<i>(Average Monthly Cost for reporting districts-excludes Kaiser, SBIP, Pinecroft, Holiday)</i>		<i>(Weighted Average DSL of reporting districts-excludes COS, Kaiser, SBIP, Pinecroft, Holiday)</i>	