

Water Meters

Agenda

- Agricultural Meter Program
- Domestic Meter Program
- Consumption Comparisons
- User Rates
- Moving Forward
- Questions

Agricultural Meter Program

Blue Box Meters

- Installed on all properties that have 2.0 arable acres or more
- The majority of installations took place between 2005 and 2010
- Starting in 2015, monthly consumption is being circulated to irrigators
- Irrigator rates are still \$144.89 per arable acre per year
- Irrigator rates are scheduled to be reviewed

Domestic Meter Program

Grant Application

- Original 2007 grant was for the Okanagan Lake Intake and Pump Station at a cost of \$4,600,000
- The Province informed the District at the 11th hour that the project was not a green enough initiative and that it would not be successful
- District staff met and resubmitted an application for Water Separation Phase I and II and for a Domestic Metering Project
- The application for both of these projects was successful

Neptune Technology Group

- Neptune was installing meters for several neighbouring Okanagan municipalities
- Neptune proposed to give Summerland preferred pricing if we awarded the contract to them
- The preferred pricing was contingent upon Neptune starting in Summerland immediately upon completion of the neighbouring contracts
- The cost savings to Summerland as a result of the preferred pricing was approximately \$640,000
- A report was submitted to Council and approval was granted to sole source the project to Neptune

Domestic Metering Program

- The Domestic Metering Program was for the installation of approximately 4,700 domestic meters
- There was little time for planning due to the tight timeframe from receiving the grant award to commencing installation
- Installation of the meters started in August 2009
- Metering is very close to 100% complete

Issues

- Pit meters (where, when, who pays, \$1,500 by owner)
- Domestic irrigation connecting to the water service between the property line and the house
 - This remains an outstanding issue
- Multiple residences off one service
- Access to residences
- Concern about remote reading health risks
- Two or more water services to one property
 - This remains an outstanding issue that needs to be resolved in conjunction with the review of irrigator rates

Consumption Comparisons

Water Separation

- Summerland Water System and not Garnet Valley Water System
- Prairie Valley Phase I and II Water Separation project was substantially completed in December 2009
- Separated domestic mains from agricultural irrigator mains
- From July 15 to August 31 2015:
 - 147,023,000 imperial gallons, or
 - 670 mega litres

were diverted away from the WTP

Water System Consumption

Summerland Water System (WTP) – Does not include Prairie Valley Irrigator Mains

Year	WTP Volume (ML)	Difference	Rainfall
2009	9723	Water Separation completed Dec 2009	163
2010	8501	-1222	215
2011	8974	+473	194
2012	7926	-1048	223
2013	7162	-764	243
2014	7778	+616	181

Drop in consumption 2009 to 2014 – 20%

Water System Consumption

Summerland Water System Total – Includes both WTP and Prairie Valley Irrigator Mains

Year	Total Volume (ML)	Difference	Rainfall
2009	11321	Water Separation completed Dec 2009	163
2010	10296	-1025	215
2011	9979	-301	194
2012	8883	-1096	223
2013	8001	-882	243
2014	8734	+733	181

Drop in consumption 2009 to 2014 – 22.9%

Water System Consumption

Garnet Valley Water System

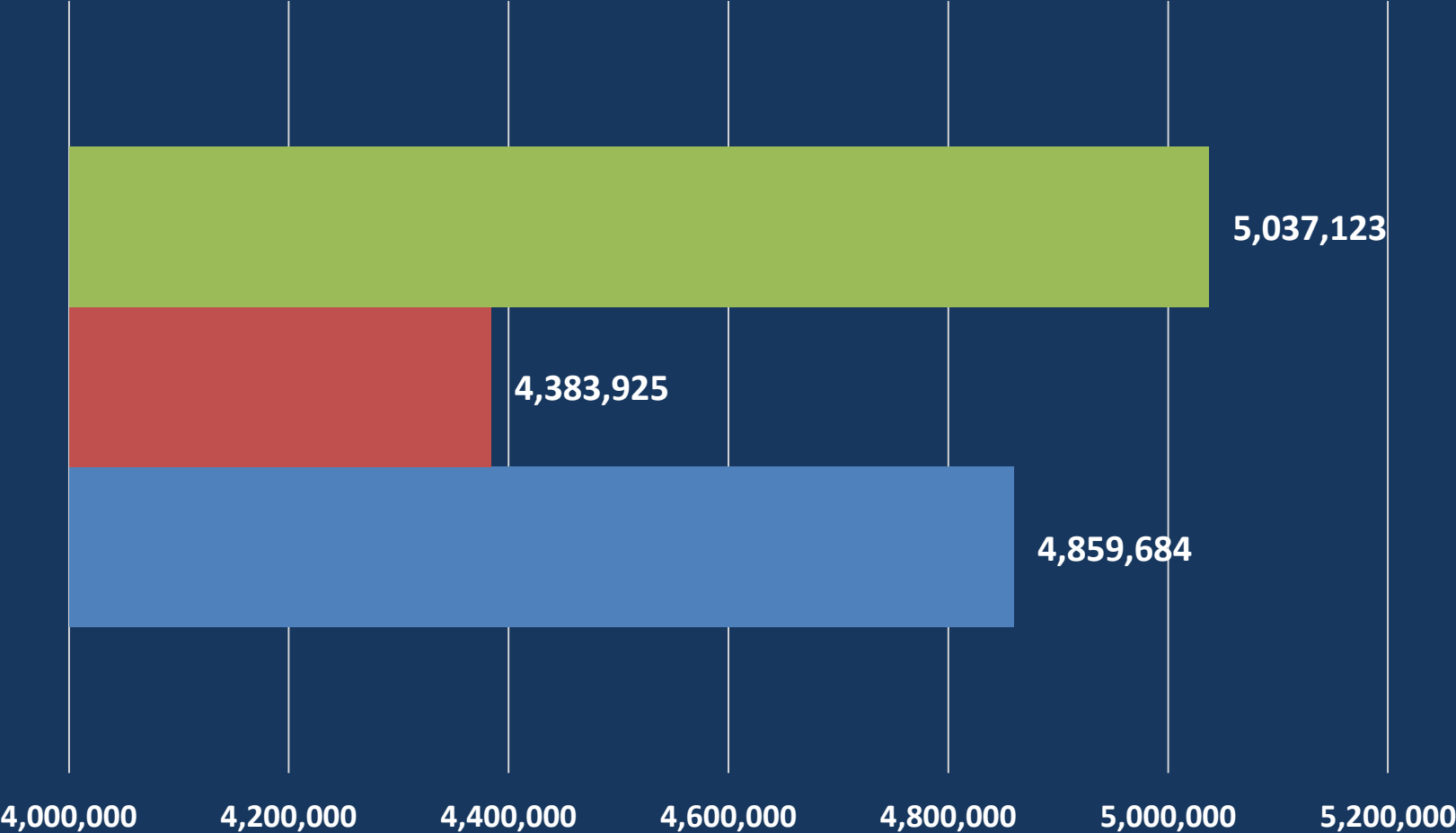
Year	Total Volume (ML)	Difference	Rainfall
2009	756		163
2010	660	-96	215
2011	598	-62	194
2012	645	+47	223
2013	520	-125	243
2014	596	+76	181

Drop in consumption 2009 to 2014 – 21.2%

Irrigator Consumption

Total Annual Consumption in Cubic Meters

2012 2013 2014

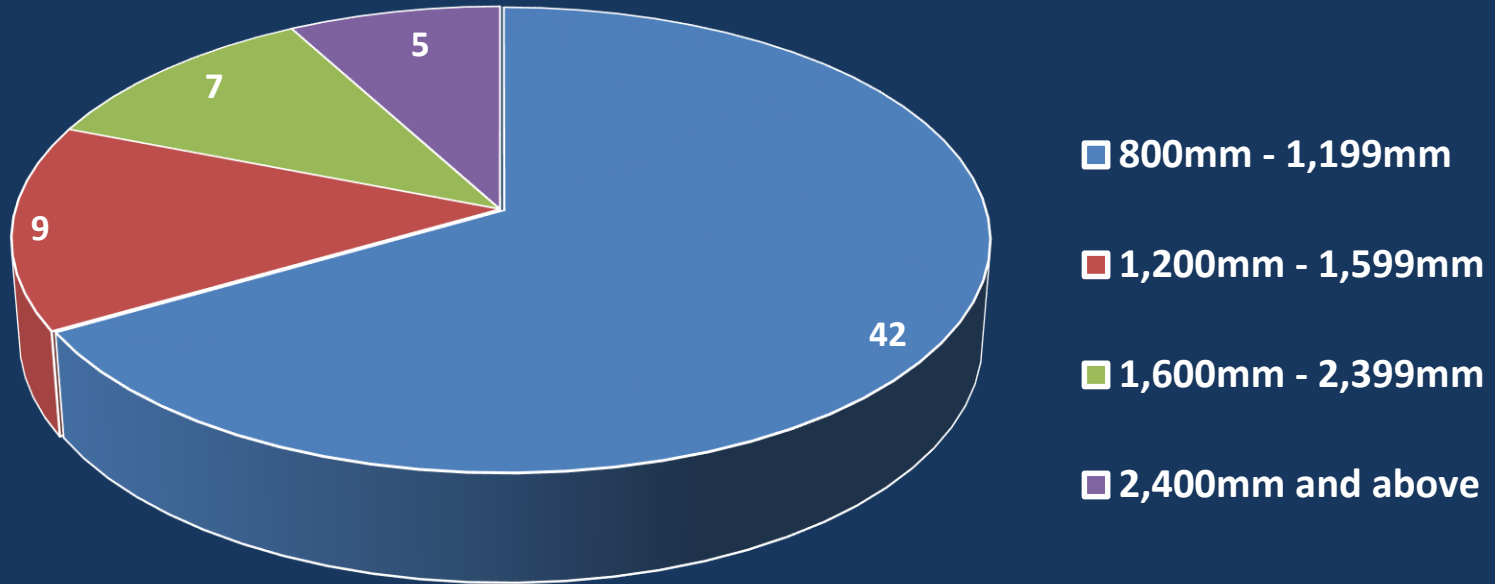


High Consumption Agricultural Irrigator Users

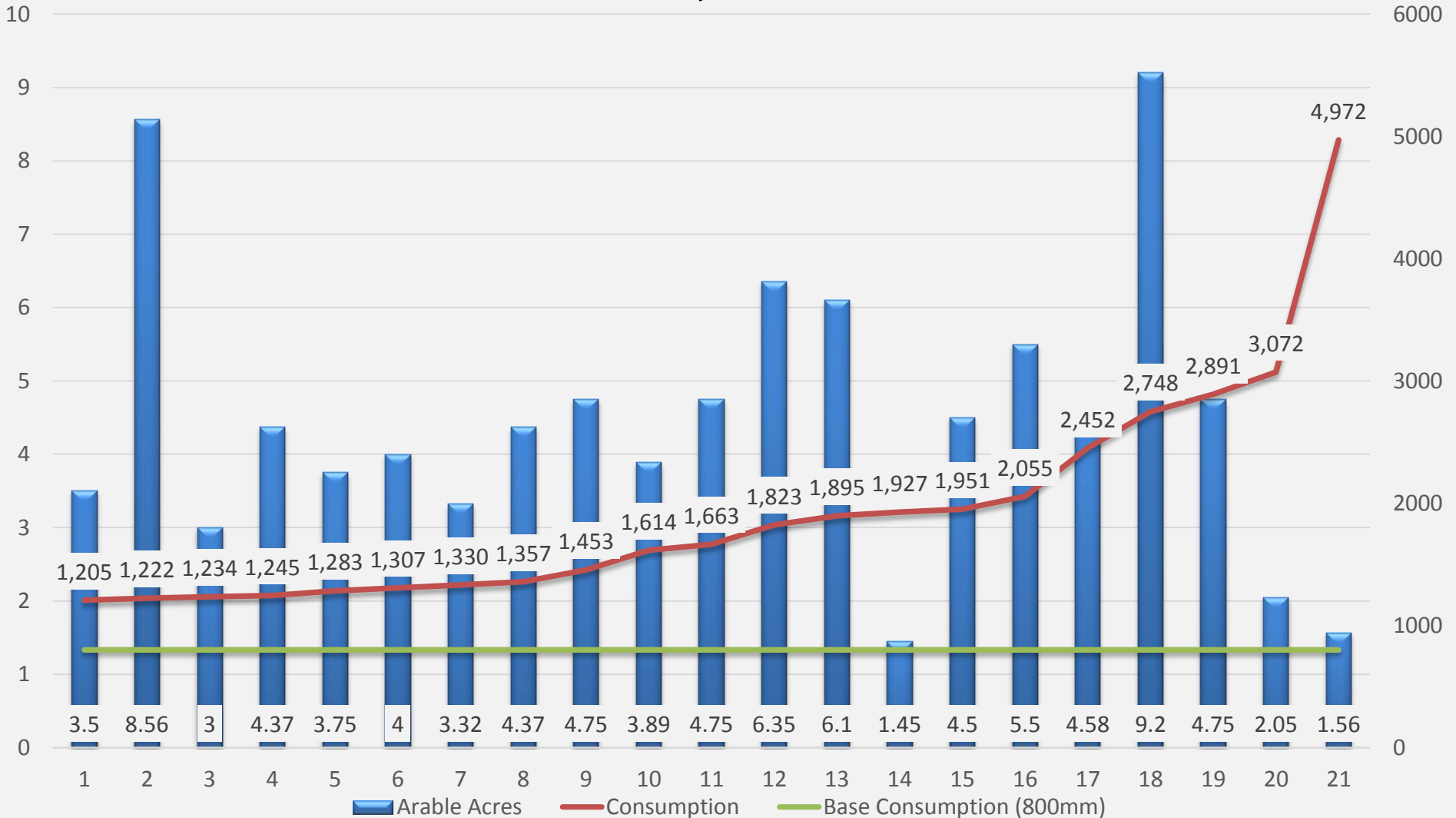
- The District currently allots 800mm per year per arable acre of property
- The following is a breakdown of agricultural irrigator consumption by depths:
 - 331 use less than 800mm
 - 42 use between 800mm and 1199mm
 - 9 use between 1200mm and 1599mm
 - 7 use between 1600mm and 2399mm
 - 5 use more than 2400mm

High Use Customers

63 Accounts with Water Consumption >800mm



Projected 2015 Consumption over 1,199 mm



Water Rates

Domestic Water Rates

- Domestic Water Rates are comprised of a Base Rate plus a Consumption Rate per m³
- The base rate is \$28.45 (10% discount if paid on time)
- The monthly threshold is based on 70% of the parcel size in m² multiplied by the applicable monthly depth as shown on the chart on the next slide
- The consumption rates are:
 - \$0.31 per m³ up to the total monthly threshold
 - \$1.18 per m³ for water consumption over the total monthly threshold

Monthly Domestic Irrigation Allotments for Billing

#	Month	Reading Day	Depth Allotment (m)	Per Dwelling Allotment (m ²)
1	January	28	0.0000	25.00
2	February	28	0.0000	25.00
3	March	28	0.0000	25.00
4	April	28	0.0350	25.00
5	May	28	0.0950	25.00
6	June	28	0.1500	25.00
7	July	28	0.1800	25.00
8	August	28	0.1919	25.00
9	September	28	0.0931	25.00
10	October	28	0.0500	25.00
11	November	28	0.0000	25.00
12	December	28	0.0000	25.00

Sample Calculation

- A property of 0.5 ha. would have a monthly threshold for August of:
 - $70\% \times 5000 \text{ m}^2 \times .1919 \text{ m} = 671.65 \text{ m}^3 + 25 \text{ m}^3 = 696.65 \text{ m}^3$
- If they consumed 850 m³ of water in August the monthly bill for August would be:
 - Base rate = \$28.45
 - Threshold Consumption, $696.65 \text{ m}^3 \times \$0.31/\text{m}^3 = \$215.96$
 - Over Threshold Consumption, $850 \text{ m}^3 - 696.65 \text{ m}^3 = 153.35 \text{ m}^3 \times \$1.18/\text{m}^3 = \$180.95$
 - Total bill for August = $\$28.45 + \$215.96 + \$180.95 = \425.31

Agricultural Irrigator Rates

- Currently the Agricultural Irrigator rates remain the same at \$144.89 per arable acre per year
- Residential properties with two services are paying flat fees for the second service as follows:
 - 0.0 to 0.5 ha. - \$ 44.00 per year
 - .51 to 1.0 ha. - \$ 112.00 per year
 - 1.0 to 1.5 ha. - \$ 184.00 per year
 - 1.51 to 1.99 ha. - \$ 254.00 per year
- The above rates are under review and may be subject to change

Water Revenues

- Operation and maintenance of the supply and distribution system including water treatment
- Renewal of existing infrastructure
- Domestic and commercial metered rates were implemented as revenue neutral – 5% increase in the anticipated rate for 2015 due to lower consumption
- ~~No change in the irrigator per arable acre charge since 1997~~ No recent changes in the irrigator rates
- Each parcel with water pays \$285 per year
- \$400,000 per year available for capital works with the majority of that allocated to the Garnet Valley Water Separation project for the next 5 years

Moving Forward

Moving Forward

Some items that need to be considered as we move forward with the review of the Agricultural Irrigator Rates:

- Water allotments, are they necessary, should they better reflect actual use, should they be the same for all users?
- What type of rate structure, flat, tiered, other?
- What are other municipalities doing with irrigator rates?
- What are some of the possible issues?
- What type of communication is necessary?
- Who are the stakeholders?
- Who is entitled to the less expensive irrigator water?

Questions?

POSSIBLE TIMELINE FOR DELIVERY OF IRRIGATOR RATES BY 2016
WATERING SEASON
INCLUDING THE DOMESTIC SECOND SERVICE CONNECTIONS

OCTOBER 14 – introduce draft framework to committee

OCTOBER 28 – open house on irrigator water rates and
domestic second service

NOVEMBER 12 – revised framework presented to committee

DECEMBER 9 – open house with revised irrigator water rate and
domestic second service options

DECEMBER 16 – revision #2 framework presented to committee

JANUARY/FEBRUARY – committee review and further open
house if required

FEBRUARY 10 – recommendations to Council

FEBRUARY 22 – introduction to Council – first 2 readings of
bylaw

MARCH 23 – adjustment of bylaw if needed and final reading

APRIL 11 – adoption of bylaw