Community Information Meeting Nov 26, 2026:

Transition to Metered Water Billing

Van Anda Improvement District
Safe Water for Everybody

The Van Anda Improvement District is preparing to transition from flat-rate water tolls to metered water billing, with metered billing scheduled to begin in 2028.

Meters have now been installed at all water connections. Before metered billing is introduced in 2028, the Board is seeking property owner input on the most appropriate method of recovering water system costs. Mock billing will be conducted throughout 2027 using actual consumption data for discussion and demonstration purposes only. No payment will be required.

What Is Not Changing

- Parcel taxes will continue to be billed annually.
- The water system must continue to recover its operating and capital costs.
- Water service will continue to be available to all customers.

What Is Changing

- Water meters have been installed at all water connections.
- Water use will be measured using meter readings.
- Water consumption charges are expected to be billed quarterly.
- A fixed annual base charge is proposed to recover fixed operating costs and non-revenue water costs.
- Mock billing will be conducted during 2027 before metered billing begins in 2028.
- Operating costs currently funded through parcel taxes would instead be recovered through water rates, allowing a corresponding reduction in parcel taxes. Parcel taxes would remain only for infrastructure, capital, and other non-operating costs.

Why Change?

Moving from annual flat-rate tolls to metered billing ties part of your cost to actual water use. It also gives owners regular usage feedback and helps catch high use early. Metering makes it possible to recover a portion of water costs based on actual consumption rather than entirely through fixed annual charges. The goal is to balance fairness, affordability, conservation, customer understanding, and administrative efficiency.

Monitoring Water Use

As water meters have come online over the past few months, District staff have been monitoring water use and following up on unusual consumption patterns to identify potential leaks or meter issues.

To date, staff have identified approximately 37,500 U.S. gallons per day of customer-side leaks and excess usage. About 10,700 U.S. gallons per day remain unresolved. Most property owners contacted have acted promptly to repair leaks or reduce unnecessary water use. Current daily production is down to about 60,000 U.S. gallons per day, compared with historical production in excess of 150,000 U.S. gallons per day.

Property owners can now access a customer water-use portal to view meter readings, monitor water consumption, receive usage information, and set alerts when consumption exceeds a level they choose.

- Account setup letters will be mailed in the coming weeks. Owners who wish to access the portal sooner may contact the District office for their account information.
- Property owners without internet access may contact the District office to have usage alerts set up on their behalf.
- The customer portal will also include a link to a water cost calculator on VAIDs website. By entering their consumption data, property owners will be able to estimate water charges under the proposed rates before billing begins. This will help users understand how their water use may affect future bills and compare the impact of different usage levels.

Water Production and Water Loss

Based on recent water production data and customer meter readings, approximately 60% of water produced is currently classified as non-revenue water, primarily due to leaks and other system losses. Although this is a significant improvement from historical levels, the District must still pay to treat and deliver all water produced, including water that does not reach a customer meter. These costs must be recovered through the water rate structure.

Cost Recovery Approach

There are several ways to recover the costs of operating the water system. Costs that do not vary significantly with water consumption can be recovered through either a fixed base charge

or the metered water rate. These costs include administrative and utility support, as well as the cost of non-revenue water lost through system leaks.

Regardless of the recovery method chosen, the total amount that must be collected remains largely the same. The difference is how costs are distributed between fixed charges and consumption-based charges.

Under the proposed model, water system costs are recovered through three mechanisms:

- Parcel taxes for infrastructure, capital, and other non-operating costs.
- A base charge for fixed operating costs and non-revenue water costs.
- A metered water rate for costs that vary with water consumption.

The Board has considered several models:

- Whether the base charge should be billed annually or quarterly.
- How water system costs are allocated between the fixed base charge and the metered consumption charge.
- Which cost categories should be recovered through each charge.

The model presented here is the Board's preferred approach based on the information currently available. However, costs can be allocated in different ways. For example, a larger portion of fixed and non-revenue water costs could be recovered through the metered water rate, reducing the base charge, or more costs could be recovered through the base charge, reducing the metered rate.

Community feedback will help determine whether other approaches should be considered before mock billing begins in 2027. The mock billing period will provide both the District and property owners with an opportunity to evaluate the proposed billing model, review its impacts, and make adjustments, if necessary, before live billing begins in 2028.

How Water System Costs Are Recovered

Under the current system, increasing water treatment and operating expenses have resulted in some water system costs being funded through parcel taxes.

Under the proposed metered billing system, all water system operating costs would be recovered through water rates, allowing a corresponding reduction in parcel taxes. During the

rate study, expenses were grouped into four categories and assigned to either the base charge or the metered consumption charge based on the most appropriate method of cost recovery.

1. Parcel Tax
2. Fixed Operating Costs
3. Consumption-Related Costs
4. Non-Revenue Water Costs

1. Parcel Tax

Parcel taxes will continue to be invoiced annually in January and are intended to recover infrastructure, capital, and other non-operating costs. Examples include water mains, valves, storage tanks, major equipment replacement, and capital reserve contributions.

2. Consumption-related costs

The metered rate recovers water production costs that vary with water use, including treatment consumables and operating labour. Consumables include treatment chemicals such as salt and chlorine, filtration supplies and cartridges, water quality monitoring, electricity, freight, and other expenses directly associated with producing and delivering safe drinking water.

3. Fixed operating costs

Administrative and utility support costs. This portion of the base charge is not limited to billing and office functions. It includes utility management, financial administration, audits, regulatory compliance, government reporting, planning, budgeting, meter data management, customer support, software systems, insurance, communications, and other services required to maintain and operate the water utility. Many of these costs exist whether water consumption is high or low and are required to ensure the utility remains compliant, financially sustainable, and able to provide reliable service

4. Non-revenue water costs

This portion of the base charge recovers the cost of treating and delivering water that is produced but not billed because of system leaks and other losses. The District must still pay these costs even when the water does not reach a customer meter.

As system leak repairs continue and non-revenue water losses decrease, the leak-recovery portion of the base charge is expected to decrease. Continued leak detection and repair remains an important part of controlling future water costs.

Base Charge

For the proposed billing model, the base charge would recover:

- Fixed operating costs.
- Non-revenue water costs.

These costs are shared across all connected properties and do not depend on an individual property's water consumption.

The base charge will apply to each connection except high-volume commercial customers. For those customers, equivalent fixed and non-revenue water costs are incorporated into the commercial metered rate rather than being charged as a separate base fee. This helps ensure that major water users pay their share of fixed system costs and non-revenue water losses, rather than being subsidized by other property owners.

Billing Frequency

Several billing frequencies were evaluated. Quarterly billing is the Board's preferred approach because it balances customer awareness of water use with administrative efficiency.

- Monthly billing provides the quickest notification of leaks and unusual water use for customers who are not using the online monitoring tools. However, monthly billing significantly increases administrative costs.
- Annual billing minimizes administrative costs but may delay the identification of leaks and can result in large, unexpected year-end bills.
- Quarterly billing provides a balance between regular customer feedback, leak awareness, and manageable administrative costs.

Base Charge Collection

For the initial implementation of metered billing, the Board proposes collecting the annual base charge at the beginning of the year, with water consumption charges billed quarterly.

Collecting the base charge annually ensures sufficient revenue is available to cover operating expenses that occur throughout the year while the new billing system is established.

After the first full year of operation, the District may consider dividing the annual base charge into four equal quarterly installments and including it on the quarterly water bill. This would spread costs more evenly throughout the year while maintaining the same overall level of cost recovery.

Questions for Community Feedback

- Is the proposed cost recovery model fair and easy to understand?
- Does quarterly billing provide sufficient feedback on water use?
- Are the customer portal, usage alerts, and water cost calculator useful?
- What concerns should the Board address before live metered billing begins in 2028?

RATE DETAILS

The following scenario recovers all administration costs and the cost of consumables for non-revenue water in the base rate. The metered rate recovers only consumables and labour costs.

The mock Parcel Tax rates were calculated by applying the same proportional reduction to each parcel class as the overall reduction in Parcel Tax revenue resulting from the revised allocation of costs.

- In previous years, all Parcel Tax rates were increased by the same amount, which widened the cost difference between larger and smaller properties.
- Applying a proportional adjustment to each parcel class reduces this disparity while resulting in a slight increase in the total annual cost for a typical Parcel A property with average water consumption.

School Billing

The school was previously charged a flat annual toll of $9,500. Based on metered consumption data collected during the summer period, when average demand was approximately 15 m^3 per day (4,000 US gallons per day), the estimated annual charge under the proposed rate structure would be approximately $7,300.

This represents a reduction of approximately $2,200 (23%) compared with the previous flat-rate charge.

		Revenue								
Admin		**$13,750**								
- from Fire admin, late penalties, interest, misc										
Parcel Tax			**Mock Rate**	**Units**	***Actual Rate 2027***		**Expenses 2027**			
Group A - <0.5 acre		$51,317	290	177	*$477*		Treatment	156,160		
Group B - 0.5-1		$14,223	395	36	*$650*		Infrastucture	94,354		
Group C - 1-5		$18,083	532	34	*$875*		Fixed System	150,915		
Group D - >5		$10,731	976	11	*$1,605*		Total	401,429		
Parcel Subtotal		**$94,354**		**258**						
		$$	**$$ unit**	**m3**			*treatment/annual volume*			
Annual estimated water use				*89,000*		per m3	**1.75**	*rate using consuma*		
Estimate lost to leaks	***60%***	*$93,696*		*53,400*						
Metered Rate			*2026: $3.61*			**portion of production**	% of fixed cost	% of leak cost		addtl /m3
Large commercial		$36,024	$4.50	8,000		9%	$13,565	$8,422		$2.75
Revenue		$48,427	$1.75	27,600		31%				
Metered Subtotal		**$84,452**								
Base Rate										
Non-revenue water		$93,696	$1.75	53,400		60%				
Fixed system costs		$150,915								
less base recovered from Commercial Rate		$21,988								
Base Rate to recover		**$208,874**	**$893**	**234**	connections					
Water Subtotal		**$293,325**								
Treatment + Fixed - Less Admin Income		*$293,325*								
Total		**$401,429**								
EXPENSES		*$401,429*								

VAID Income 1st 1/4 2028		PT + base:	303,227	PT + 1/4 Base:	146,572		PT only:	94,354											
									806.93	Base in Jan with PT				Base portion quarterly; PT Ja					
Examples	**Usage**	**Parcel Tax**		**Base rate**	**m3/day**	**USG/day**	**$$$ Actual water use**	**$$$ Total annual**	**vs Tax/ Tolls 2027**	**Jan**	**Apr**	**Jul**	**Oct**	**Jan**	**Apr**	**Jul**	**Oct**		
Parcel A	very low	$290		$893	0.1	26	$64	**$1,247**	$1,284	$1,199	$16	$16	$16	$529	$239	$239	$239		
Parcel A	average	$290		$893	0.3	66	$160	**$1,343**	$1,284	$1,223	$40	$40	$40	$553	$263	$263	$263		
Parcel A	higher	$290		$893	1.5	396	$961	**$2,143**	$1,284	$1,423	$240	$240	$240	$753	$463	$463	$463		
Parcel A big garden	avg + 3 mths at:	$290		$893	5.0	66/1,320	$908	**$2,091**	$1,284	$1,223	$40	$788	$40	$553	$263	$1,011	$263		
Parcel B	very low	$395		$893	0.1	26	$64	**$1,352**	$1,457	$1,304	$16	$16	$16	$634	$239	$239	$239		
Parcel B	average	$395		$893	0.3	66	$160	**$1,448**	$1,457	$1,328	$40	$40	$40	$658	$263	$263	$263		
Parcel B	higher	$395		$893	1.5	396	$961	**$2,248**	$1,457	$1,528	$240	$240	$240	$858	$463	$463	$463		
Parcel B big garden	avg + 3 mths at:	$395		$893	5.0	66/1,320	$908	**$2,196**	$1,457	$1,328	$40	$788	$40	$658	$263	$1,011	$263		
Parcel C no water	no water	$532						**$532**	$875	$532	$0	$0	$0	$532	$0	$0	$0		
Parcel C	average	$532		$893	0.3	79	$192	**$1,617**	$1,682	$1,472	$48	$48	$48	$803	$271	$271	$271		
Parcel C	higher	$532		$893	1.5	396	$961	**$2,385**	$1,682	$1,665	$240	$240	$240	$995	$463	$463	$463		
Parcel D no water	no water	$976						**$976**	$1,605	$976	$0	$0	$0	$976	$0	$0	$0		
Parcel D	average	$976		$893	0.3	66	$160	**$2,028**	$2,412	$1,908	$40	$40	$40	$1,239	$263	$263	$263		
Parcel D	higher	$976		$893	1.5	396	$961	**$2,829**	$2,412	$2,108	$240	$240	$240	$1,439	$463	$463	$463		
Parcel D (Rocky Valley)		$976			61		$3,310	**$4,285**											
Parcel D (RV Park)		$976			549		$29,669	**$30,645**	was 30k; more per m3 but half volume after leaks fixed										

Average daily use per per houseold in the month of:		**June**	**June %**	**August**	**Aug %**	**Nov. Est.**	**Nov. Est. %**
Cubic Metres	**US Gallons**						
<0.03 m^3	less than 8	9	9%	15	10%	19	10%
0.03 - 0.3	8 - 88	54	55%	63	43%	114	60%
0.3 -1	88 - 264	24	24%	49	34%	45	24%
more than 1	more than 264	11	11%	19	13%	12	6%
Total Households		98	-	146	-	190	-