COUNTY OF NEWELL

COUNTY PROFILE

Mark Harbicht – Director of Municipal Services Geoff Tiffin – Manager of Engineering Services



County Statistics

 A rural municipality in southeast Alberta in an area bounded by:

City of Calgary 180 Km east

100 km west of Medicine Hat

150 Km northeast of Lethbridge



- The County has a dynamic and diverse economy consisting of:
 - Agriculture
 - Oil and Gas
 - Tourism
- Approximately 500 primary agricultural producers and 1500 non-agricultural business enterprises
- Average farm receipts in the range of \$100,000 to 249,999, the region is home to some of the most profitable farmers in Alberta.
- Approximately 30,000 wells in the County, which accounts for 50% of all wells in Alberta and 37% of wells in all of Canada

County Statistics

 Total Full Time Positions 	61	
 Total Area of Municipality 619,600 Ha / 59 	oo Sq	. Km's
 Number of Hamlets 	7	
 Length of Open Roads Maintained 	1691	Km's
 Water Mains Length 	20	Km's
Water Mains Length (Regional)	884	Km's
 Wastewater Mains Length 	17	Km's
 Storm Drainage Mains Length 	8	Km's

Taxes Receivable as a % of Tax Levies

	2008	2009	2010	2011	2012	2013	2014
Total Tax Levy (includes requisitions)	38,077,534	40,131,740	37,906,610	37,798,648	38,571,559	40,464,388	41,536,602
Taxes Receivable (before allowance)							â
Current	297,544	279,540	389,320	427,744	411,923	588,708	600,093
Arrears	386,589	436,631	532,931	452,891	498,988	627,660	770,179
	684,133	716,171	922,251	880,635	910,911	1,216,368	1,370,272
Taxes Receivable as a %							
of the Current Levy							
Current	0.78%	0.70%	1.03%	1.13%	1.07%	1.45%	1.44%
Arrears	1.02%	1.09%	1.41%	1.20%	1.29%	1.55%	1.85%
Taxes Collected - Current Year	99.22%	99.30%	98.97%	98.87%	98.93%	98.55%	98.56%
Taxable Assessment	3,814,704,390	4,151,150,920	3,898,515,520	3,879,853,980	3,990,255,860	4,209,007,890	4,324,192,910
Municipal Tax Rates							
Residential and Farmland	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Non-residential	6.69%	6.70%	6.70%	6.71%	6.71%	6.71%	6.71%

\$41.5 Million in taxes are collected annually whereas 70% of the taxes are from industry. Of the top 10 tax payers in the County, 9 are oil and gas industry while 1 is the JBS meat packing plant and feedlot.

Debt Limits and Debt Payments

_	2008	2009	2010	2011	2012	2013	2014
Debt limit Maximum allowable debt	40 F20 407	40 747 500	4E 102 E20	4E 002 462	49.760.460	EE 220 204	E4 660 022
Total debt	48,529,187 7,338,304	48,747,599 6,737,971	45,193,529 6,104,914	45,092,463 5,445,212	48,760,469 21,594,161	55,238,301 24,278,145	54,668,823 30,054,422
Percentage used	15.1%	13.8%	13.5%	12.1%	44.3%	44.0%	55.0%
Maximum Allowable Annual Debt Payment							
Maximum allowable annual debt payment Annual payments on existing debt	8,088,198 998,560	8,124,600 998,560	7,532,255 990,667	7,515,411 990,667	8,126,745 2,942,755	9,206,384 3,158,232	9,111,471 5,186,171
Percentage used	12.3%	12.3%	13.2%	13.2%	36.2%	34.3%	56.9%
Debt Per Capita	1,069	949	860	767	3,182	3,401	4,210
Population* * Source: Alberta Municipal Affairs Statistics Pr	6,862 ofile	7,101	7,101	7,101	6,786	7,138	7,138

Debt per capita has risen since the onset of our County of Newell Water Project

Municipal Services

- Municipal Services expenses 5 year average is \$11 M/Yr
- 1691 Km's of Maintained Road
 - 1486 Km's Gravel Surfaces
 - 8 Grader Beats of approximately 180 Km's each
 - One year ago we operated with 10 averaging 150 Km's each
 - County spreads approx. 43,000 cu meters of crush across approx. 350 Km's of road per year
 - (2 semi tractors with bellys and 4 tandems pulling quad bellys)
 - 205 Km's Paved Surfaces
 - 5 Plow Trucks (tandems used in Gravel Program) for winter road services, averaging 40 Km's per route or 80 lane Km's

Regional Water

- Newell Regional Services Corporation (NRSC)
 - established on October 27, 2008, subject to a Minister of Municipal Affairs order. The order was received on January 12, 2009; thus legalizing the Municipal Controlled Newell Regional Services Corporation.
- Regional system originally brought into discussion approximately 10 years earlier
 - Included the Villages of Duchess and Rosemary (former Village of Tilley), Town of Bassano, City of Brooks, and County of Newell.

- Regional meant an elaborate network of pipelines connecting all "urbanized" areas
- The regional pipeline network was phased and estimated to take 3-5 years to complete, with an engineered estimate of \$54.0 million project cost.

Funding Sources:

Alberta Transportation

Alberta Municipal Water/Wastewater Partnership (AMWWP)

\$43,941,612

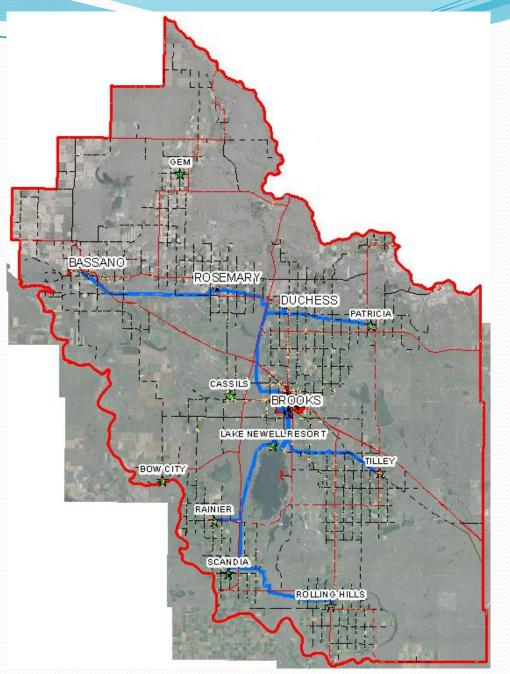
• City of Brooks \$6,370,490

County of Newell \$3,733,897

• TOTAL \$54,046,000

Regional Water

- First Phase was Brooks WTP upgrades and pipeline to the (former Village) Tilley – Tilley had been under boil water advisory for more than a year!
- Second phase was Brooks to the Hamlets of Lake Newell Resort, Rainier, Scandia and Rolling Hills
- Third phase was Brooks west
- Fourth phase was Brooks west to the Village of Duchess and Hamlet of Patricia
- Fifth phase was Village of Duchess to Rosemary
- Final phase was Village of Rosemary to Town of Bassano



- Water Treatment Plant Capacity 32,000 m³/day
- **Interesting fact**,... the Regional WTP is operating at 97% efficiency. NOT 97% capacity, 97% efficiency.
- Peak production day, to date, was in August of 2013 where the 17,957 m³ (which is only 56% capacity).

Pipelines

		(170.32 Km's)	(105.8 Mi)
•	TOTAL		170,320 Lm
•	From Rosemary to Bassano		30,000 Lm
•	From Patricia Pipeline Line to Rosemary		36,400 Lm
	From Patricia Pipeline to Duchess		1,410 Lm
•	From Brooks Pipeline to Patricia		16,200 Lm
•	From WTP through Brooks		5,360 Lm
•	From WTP to Rainier, Scandia, and Rollin	ng Hills	49,900 Lm
•	From WTP to Lake Newell Resort and Til	ley	31,050 Lm

- The County of Newell contracts NRSC to operate all water and wastewater systems:
 - 6 Water Distribution Stations, 5 Truck Fill Stations, 4 Sanitary Sewer Lift Stations, 4 Sanitary Sewer Treatment Lagoons
- NRSC staffing levels are as follows:
 - One General Manager
 - One Chief Plant Operator
 - Two Systems Operators (Plant Staff)
 - One Operations Supervisor
 - Two Systems Operators (Field Staff)
 - One Administration Supervisor
 - One Administrative Assistant
- Interesting fact,... NRSC Operators (Field Staff) drive a combined total of 400,000 Km's per year, or 1095 Km's per day.
- Interesting fact,... NRSC Operators undertake 155 water samples for quality testing per week, or 8060 per year.



- Initiative to provide potable water to all residents and businesses in the County of Newell
- Expansion of Regional Water Project to provide potable water to Urban Centres.

The Trickle System

- Water is delivered to on site storage mediums (cisterns, holding tanks)
- Water must be pumped from storage medium for domestic use
- Water is delivered at a rate of 300 imp. Gal. / day
- Not designed to accommodate fire protection
- Trickle systems are economically viable only if a sufficient number of customers are serviced in relatively compact areas to ensure adequate water turnover

The Flow Emitter

- Float Valve
- Dual Check valve
- Flow Restricting Orifice
- 'Y' Strainer with Screen
- Ball valve
- 3/4" Compression Fitting



The First Plan

- County split into 6 service areas, construct one per year
- Landowner cost to register: \$7,000
- Receive service at yard site. Cost to tie into cistern is landowner responsibility
- Registration Open: November 8, 2010
- Registration Closed: January 31, 2011

Council Deliberation

- Report produced for Council to review the legitimacy of the project.
- 40% of possible service locations had been registered
- Feedback received
 - Interested in project however too costly
 - Quicker construction timeline preferable
- Council holds number crunching workshop
- New plan is formulated

The Revised Plan

- County split into 10 service areas, construct one in year one and three each subsequent year
- Landowner cost to register: \$1,000
- Receive service at yard site. Cost to tie into cistern is landowner responsibility
- Registration Open: February 7, 2011
- Registration Closed: April 29, 2011
- 81% registration with some areas well over 90%
- Council decides to move forward with the project

Easements

- All lines to be installed on private land in the County
- Landowners were required to sign 'blanket' easements for their parcels to allow CNWP lines through
- No compensation provided to keep project costs down
- If a landowner is to receive a water service they were required to allow lines to be installed on their property
- Easement signing meetings were held prior to each contract at the community hall in the respective area.
- Easements not collected at the meetings were pursued individually

Selecting a Contractor

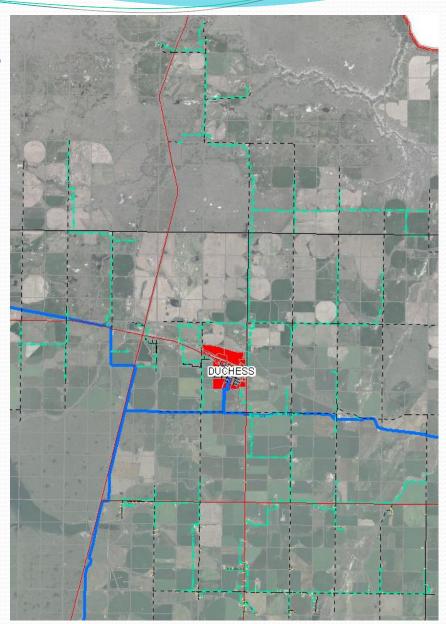
- Decided that an annual pre-qualification of contractors eligible to bid on contracts would be done
- Contractors ranked by three County representatives and one Engineering Consultant
- Ranked on General Information/Project Personnel, Qualifications/Corporate Project Experience, Work Execution Plan and References
- Only those contractors obtaining 70% on the prequalification were eligible to bid on contracts that year

Installation

- Plowing
 - Cheapest installation method
 - Minimal Disturbance to private lands
 - Challenging to move equipment due to many crossings
 - Hard Ground Challenges
- Horizontal Directional Drilling
 - More expensive method
 - Tie in holes settle and are lost once crop grows (find during harvest)
 - Essential for Crossings

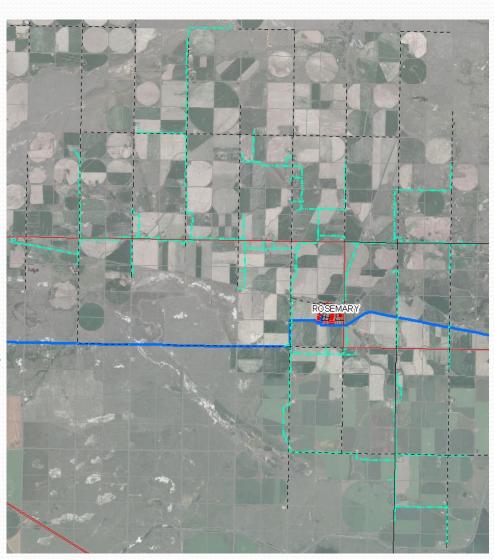
Contract 1 Division 8

- 135 km of HDPE pipe
- 19 highway crossings
- 95 County road crossings
- 137 EID crossings
- 320 gas/oil crossings
- 234 service connections
- Awarded: September 8, 2011
- Activated: January 21, 2013
- Cost: \$ 5,574,687



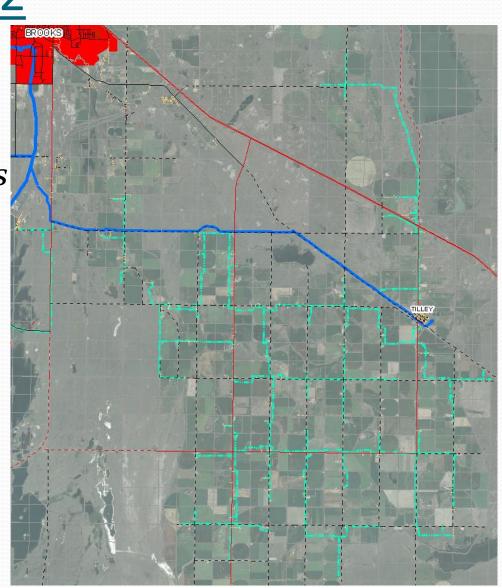
Contract 2 Division 7

- 81 km of HDPE pipe
- 14 highway crossings
- 65 County road crossings
- 101 EID crossings
- 267 gas/oil crossings
- 105 service connections
- Awarded: January 21, 2013
- Active: June 9, 2015
- Cost: \$ 2,652,583



Contract 3 Division 2

- 152 km of HDPE pipe
- 38 highway crossings
- 105 County road crossings
- 156 EID crossings
- 425 gas/oil crossings
- 173 service connections
- Awarded: August 9, 2012
- Active: October 11, 2013
- Cost: \$ 5,056,481



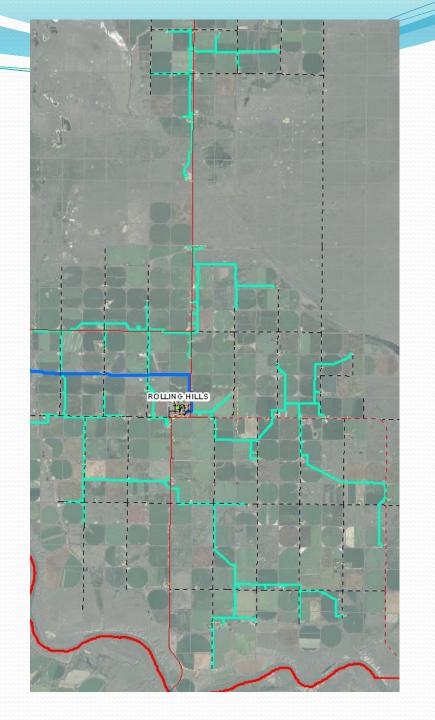
Contract 3A Kinbrook Island Park

- 2 km of HDPE pipe
- 40 gas/oil crossings
- 42 service connections
- Awarded: September 6, 2012
- Active: May 10, 2013
- Cost: \$ 704,235



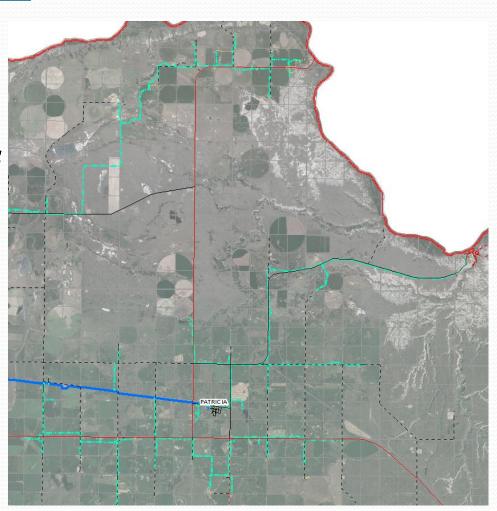
Contract 4 Division 1

- 105 km of HDPE pipe
- 20 highway crossings
- 55 County road crossings
- 95 EID crossings
- 230 gas/oil crossings
- 96 service connections
- Awarded: March 8, 2012
- Active: July 7, 2013
- Cost: \$ 2,401,898



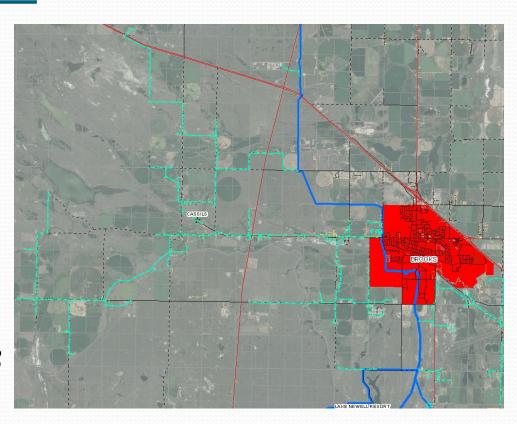
Contract 5 Division 3

- 103 km of HDPE pipe
- 17 highway crossings
- 58 County road crossings
- 128 EID crossings
- 211 gas/oil crossings
- 84 service connections
- Awarded: July 25, 2013
- Active: June 30, 2014
- Cost: \$ 4,981,358



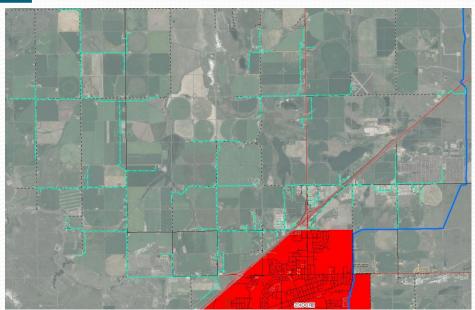
Contract 6 Division 5

- 118 km of HDPE pipe
- 18 highway crossings
- 133 County road crossings
- 113 EID crossings
- 343 gas/oil crossings
- 285 service connections
- Awarded: November 7, 2013
- Active: July 24, 2015
- Cost: \$ 7,616,325



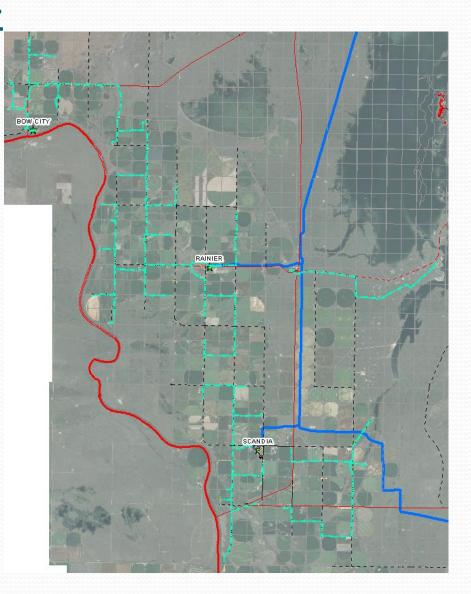
Contract 7 Division 10

- 99 km of HDPE pipe
- 8 highway crossings
- 145 County road crossings
- 100 EID crossings
- 185 gas/oil crossings
- 263 service connections
- Awarded: October 11, 2012
- Active: September 5, 2014
- Cost: \$ 5,427,632



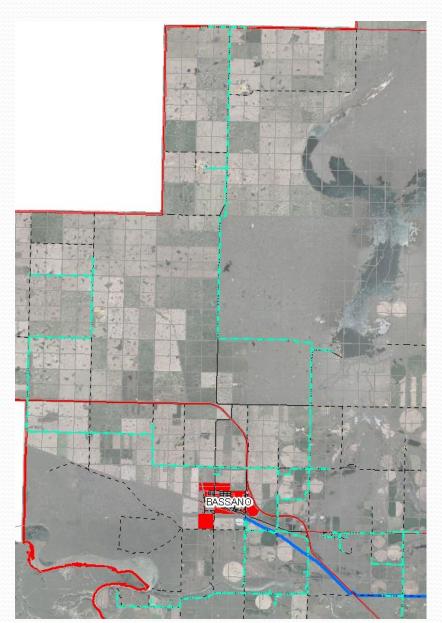
Contract 8 Division 4

- 126 km of HDPE pipe
- 16 highway crossings
- 77 County road crossings
- 109 EID crossings
- 210 gas/oil crossings
- 114 service connections
- Awarded: July 24, 2014
- Active: July 28, 2015
- Cost: \$ 5,430,947



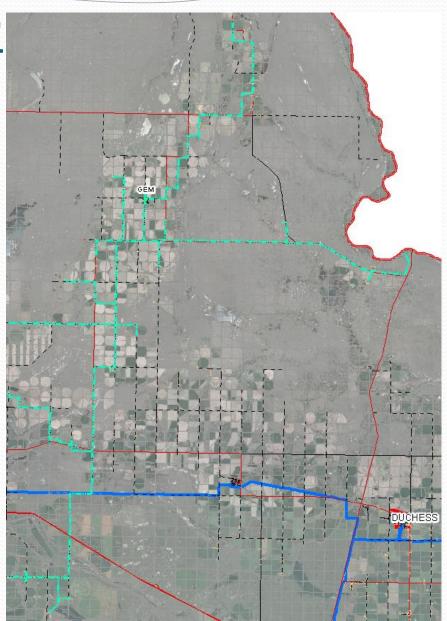
Contract 9 Division 6

- 112 km of HDPE pipe
- 5 highway crossings
- 67 County road crossings
- 25 EID crossings
- 161 gas/oil crossings
- 71 service connections
- Awarded: January 15, 2015
- Active: Spring 2016
- Cost to date: \$ 3,569,503
- Total Cost Est.: **\$5,539,003**



Contract 10 Division 9

- 140 km of HDPE pipe
- 25 highway crossings
- 110 County road crossings
- 114 EID crossings
- 255 gas/oil crossings
- 110 service connections
- Awarded: May 7, 2015
- Active: Summer 2016
- Cost to date: \$ 2,108,088
- Total Cost Est.: \$7,720,489



Total Project Quantities

- 1,173 km of HDPE pipe
- 180 highway crossings
- 910 County road crossings
- 1,078 EID crossings
- 2,647 gas/oil crossings
- 1,577 service connections

Costs and Funding

- Total Projected Project Cost: \$53,105,638
- Engineer's Estimate (Feb. 2010) \$50,757,000
- Cost per service: \$33,675
- Funding Sources:
 - Provincial Grants \$ 29,694,431.00
 - Local Contribution \$ 1,905,569
 - Debenture Financing \$ 22,400,000
 - Total \$ 54,000,000

Subsidies

- Eastern Irrigation District Subsidy
 - Offers \$2,000 rebate to members who own first or second water rights
 - Payable once member has connected to County water system
- Alberta Agriculture Growing Forward II
 - Available to bona fide agriculture producers
 - Requires on farm water management plan
 - Eligible to recoup 50% of costs up to \$5,000

Challenges

- No compensation for easements
- Contractor landowner communication
- Contractor utility owner cooperation and communication
- First Calls
- Hardware issues
- Timeliness of agreements
- Consistency

Policies Moving Forward

- Landowners are still eligible to connect where capacity exists
- Cost of installation:
 - \$7,700 registration fee payable to the County
 - Full cost to have service installed to location
- Monthly cost for water is \$44
 - \$20 administration fee charged
 - \$24 consumption fee charged

Thank You

QUESTIONS??

Website

www.countyofnewell.ab.ca

Mark Harbicht

harbichtm@newellmail.ca

Geoff Tiffin

tiffing@newellmail.ca