

# Shirley McClellan Regional Water System Business Plan

## 2013 Plan Update

## Adopted September 25, 2013

### **Commission Members**

**Camrose County** 

**Lacombe County** 

County of Paintearth No. 18

County of Stettler No. 6

**Town of Castor** 

**Town of Coronation** 

Village of Bawlf

Village of Big Valley

Village of Consort

Village of Donalda

Village of Halkirk

Village of Rosalind

Village of Veteran

Summer Village of Rochon Sands

Summer Village of White Sands

Special Area No. 2, 3 and 4.

### **Table of Contents**

Table of Contents		2
Executive Summary		5
1. Introduction		12
1.1 Definitions		12
1.2 Project Backgr	ound	12
1.2.1 Water Nee	eds and Challenges of Supply	12
1.2.2 Regional A	approach and Development of Water Supply System	14
	Objectives and Scope	
	npleted Studies, Plans and Reports	
	Management	
2.1 Operation and	Business Entity	18
2.2 Organization o	f the Commission and Governing Board	18
	; Bylaws	
2.2.2 Commission	on Board	18
2.3 Management		18
C	'hart	
	ystem Capacity and Costs	
	Supply Agreement	
	w Members	
	Members from the Commission	
	Assets	
1	ing	
	Directions	
	Plan	
	e with ALSA Regional Plans	
	icy	
	tion	
	erved and Overview of System	
	·y	
v i	Projections	
3.2.2 Projected	Γreated Water Volumes	30
	ke	
3.3 Supply of Trea	ted Water	32
110	ply	
	reement with the Town of Stettler	
	ense	
3.3.4 Inter-basir	Transfer of Water	34
3.4 Water Transfer	r Station	35
	tation Agreement with the Town of Stettler	
	Transmission System	
	smission Line – Water Transfer Station to Consort	
	smission Line – Consort to Compeer	
	l Branch – Coronation to Brownfield	
	nsmission Line – Water Transfer Station to Donalda	

3.5	5.5	North Transmission Line - North Shore Branch	44
3.5	5.6	North Transmission Line - Meeting Creek Branch	44
3.5	5.7	North Transmission Line – Donalda to Bawlf	44
3.5	6.8	North Transmission Line – Tillicum Beach Branch	46
3.5	6.9	Big Valley Branch - Main Transmission Line to Big Valley	47
3.5	5.10	Buffalo Lake Branch - North Line to South Shore	49
3.6	Dis	stribution Systems	50
3.7	Tre	eated Water Storage	51
3.8	Bul	lk Water Stations	51
4.	Pro	ject Capital Costs and Funding	52
4.1	Caj	pital Costs	52
4.2	Caj	pital Financing	52
4.2	2.1	Government Grant Funding	
4.2	2.2	Direct Contributions by Members	55
4.2	2.3	Debenture	56
4.2		Debt Limit	
4.3	Caj	pital Development Alternatives	
	3.1	Buffalo Lake Branch	
4.3	3.2	North Shore Branch	
5.		tem Operation	
5.1		nagement and Administration	
5.2		erations	
5.3		nancial Management	
5.3		Financial Plans and Budgets	
5.3		Financial Reports	
5.3		Cash Management and Authorization of Expenditures	
5.3		Interim Borrowing or Line of Credit	
5.4		urance and Risk Management	
5.5		perta Environment Operating Approvals	
5.6		licy Development	
6.		erating Costs and Revenue	
6.1		vernance and Administrative Operations	
6.2		stem Operations	
		Projected Operating Expenditures and Required Revenues	
6.2		Capital Development and Major Capital Asset Replacement	
6.3		tes and Charges	
6.3		Principles Governing the Establishment of Long Term Rates	
6.3		Calculation of Rates 2013 - 2017	
6.3		Financial Picture – Completion of the System	
6.3		Minimum Volume Charges	
6.3		Rate Comparisons	
6.4		nancial Summary	
7.		ks and Barriers	
8.		e Diligence	
		A Shirley McClellan Regional Water Services Commission Regulation	
		B – Commission Bylaws	
Bv	law`	No. 7-12	85

Bylaw No. 6-11	88
Appendix C Member Water Supply Agreement Template	
Appendix D Detailed Population and Water Volumes	117
Appendix E East Central Regional Water Authorization Act, SA 2007 c. E-0.2	118
Appendix F Detailed Costs and Funding for Completed Capital Projects	119
Appendix G Actual and Short Term Projected Consumptions	120
Appendix H Tangible Capital Asset Details	121

### **List of Tables**

Table 2.1 –	Allocated of System Capacity
Table 3.1 –	Summary of 25 Year Water Flows
Table 3.2 <b>-</b>	Buffalo Lake Growth Node Development Limits
Table 3.3 –	Design Capacity by Line Segment
Table 4.1 –	Summary of Capital Expenditure and Financing
Table 4.2 –	Estimation of Capital Costs for Remaining Line Segments
Table 4.3 –	Debenture Borrowing Details
Table 4.4 –	Detailed Debt Limit Calculation
Table 6.1 –	Governance and Administrative Operations
Table 6.2 –	System Expenditures Recovered from Rates
Table 6.3 –	Rate Calculation for Water Services
Table 6.3.1 <b>-</b>	Possible Financial Picture for Year 2021
Table 6.4 –	Summary of Income Statement Items
Table 6.5 –	Summary of Balance Sheet Items
Table 6.6 –	Summary of Contributions and Charges by Member

The Tables in this Plan are created using interlinked spreadsheets. The amounts highlighted in yellow indicate those values that are variables within the spreadsheet. Those values not highlighted are created by calculation and formulae. As such, some columns of numbers because of rounding, may not add up exactly.

### List of Figures

Figure 2.1 – System Service Area

Figure 2.2 - Organizational Chart

Figure 3.1 - Buffalo Lake

Figure 3.2 – Transmission Pipeline Network

### **Executive Summary**

### Substantive Changes in 2013 Update from 2011 Business Plan

The Business Plan, created in 2011, is updated in 2013 to reflect continuing development of the System, adjust the areas to be served by the System, re-address timing and priorities of the development of the remaining components of the System and to update volume, cost and rate projections.

- 1. Reference made to the System Completion Plan which will set out in greater detail the development of the remaining sections of the System
- 2. Commission intent is to construct the remaining segments of the System to at least the 25 year volume capacity, however limitations in grant funding may require initial construction of lesser capacity
- Generally, the minimum pipe size to be 150 mm but for those segments projected to have relatively low volumes, the pipe size will be reduced to 100 mm (4 inch) to ensure sufficient flow velocity. Lesser sizes may need to be considered, as well, if grant funding is not available in order to initially meet immediate or short term needs.
- 4. Priorities and timing are adjusted, with some sections no longer having a specific timing because of current adequate groundwater sources
- 5. Buffalo Lake Branch would be sourced from the North Line and constructed beginning in 2015. Three Members on the South Shore will develop a trunk servicing plan
- 6. The Narrows Growth Node in Lacombe County is proposed to be serviced from the Highway 12/21 System at significantly less cost. The Commission would approach the Highway12/21 Commission to arrange connection and purchase of water.
- 7. Alternative approaches to development of Buffalo Lake Branch and North Shore Branch may be considered in the face of delayed or unavailable grant funding
- 8. Changes in the approach to connections to the System to require discharge into a reservoir, either individually at each distribution system customer location or into a central reservoir for subsequent pumping and distribution to customer locations
- 9. To ensure the long term water supply interests of the Commission and its Members, the Commission will remain aware of and participate in the consideration and public debate with respect to the protection of watersheds and sources of water for municipal supply systems, and the allocation and licensing of surface water supplies by the Government of Alberta.
- 10. Operating Costs and rates projections have been updated to reflect significant reductions in expected volume of water needed by the Members.

#### Introduction

A series of dry years over the past decade, together with the demands of growth and continuing development, have combined to put serious pressure on the existing ground and surface water supplies in the East Central Alberta Region. To meet the challenge of securing a long term water supply that will enable communities to continue to remain viable and grow and to ensure that a safe and secure source of potable water is available to the population of the region, 16 rural and urban municipalities have joined together to form the Shirley McClellan Regional Water Services Commission (Commission). With significant funding from the Water for Life Program of the Government of Alberta, the Commission has constructed and put into operation the initial section of the Main Transmission Line taking water east along Highway 12 to Consort. Lines to Big Valley and Donalda are presently under construction. These lines are part of a larger network that will serve the region. To this end the Commission has developed a Business Plan which:

- Identifies the long term water need of the Commission Members and an overall system to serve the Members.
- 2. Sets out the stages of development of this overall system, the timing, capital costs and sources of capital financing,
- **3.** Describes the governance and administration of the Commission and the responsibilities of the Members, and
- **4.** Projects expected operating costs of the System for the years 2013 2017, and the rates and contributions required of the Members

The long term water needs of the Members have been calculated based on expected population growth and consumption rates. This 25 year projected volume is the commitment of the Commission to the Member's proportionate share of the System's capacity.

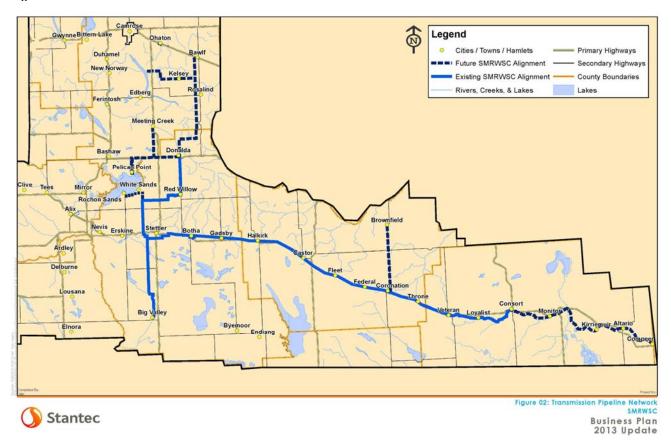
Members	Volume M3	%	Members	Members Volume M3	
Camrose County	624,554	12.3%	Village of Consort	198,544	3.9%
Lacombe County	100,000	2.0%	Village of Donalda	72,027	1.4%
Paintearth County	504,515	10.0%	Village of Halkirk	36,500	0.7%
Stettler County	1,844,291	36.4%	Village of Rosalind	61,430	1.2%
Town of Castor	292,805	5.8%	Village of Veteran	91,443	1.8%
Town of Coronation	336,334	6.6%	SV of Rochon Sands	78,840	1.6%
Village of Bawlf	110,048	2.2%	SV of White Sands	74,724	1.5%
Village of Big Valley	106,474	2.1%	Special Areas	531,691	10.5%
			-	5.064.220	100.0%

The Members have agreed that in the long term, the operating and capital development costs of the System will be recovered by way of a rate per cubic meter (m3) of water actually consumed by each

Member. This rate will be a "postage stamp rate" or one that is uniform and common to all Members regardless of their location within the System. However, until all Members are substantially drawing water from the System, the capital development costs will be allocated on the Member's proportionate share of the System capacity, while the governance and administration costs of the Commission will be shared equally among the Members.

### **Regional Water System**

By way of purchase agreement with the Town of Stettler, the System will be supplied with treated water from the Stettler Water Treatment Plant which draws raw water from the Red Deer River. This plant was upgraded with funds from the Water for Life Program to serve the needs of the Shirley McClellan System and also that of the Highway 12 / 21 Regional Water System to the west. Treated water will be conveyed in time to all of the Members through the pipeline network set out in the figure below. The remaining portion of the System will be constructed in stages, the timing of which will be dependent on the water needs and supply situation of the Members to be served by the particular stage and on the availability of major grant funding.



The Commission has identified in the following table, the expected timing at this point of the continued development of the System. The priority of the other sections may need to be adjusted to respond to changes of circumstance or availability of funding and the Commission will continue to review the timing of the stages. It is the top priority and goal of the Commission to develop much of the system by 2021, 8 years

from this point in time and 15 years from the time the Members came together to develop the regional system. Should the need for water services to areas not yet served emerge before the availability of Water for Life grant funds, the Commission may need to consider alternative approaches, possibly including the construction of lesser capacity pipelines to at address short term needs.

### **Estimated Capital Costs and Financing**

The capital cost of the entire System is estimated at \$92 Million. Nearly \$45 Million has already been expended on the Water Transfer Station, a central reservoir and pumping facility for the System, and the Main Transmission line east. A total of \$15 Million is committed to the Big Valley Branch and the North Line to Donalda line, leaving an additional \$33 Million required to complete the remaining sections of the System.

For the constructed portion of System, a grant of 90% of the cost was received from the Water for Life Program. The remaining 10% was funded by the Commission through debenture debt borrowing. The Big Valley Branch and North Line to Donalda have also been approved for Water for Life Funding at 90%. The same proportion of grant funding has been forecast for the remaining stages of the System. The Commission's 10% share of the remaining capital costs will continue to be funded by long term, 25 year amortization borrowing from the Alberta Capital Financing Authority. The Plan's financial calculations allow for a 4% annual interest rate for borrowings in the next few years, rising to 5% thereafter.

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	2018 and	Total
	Completed	2012-2013	2013	2014	2015	2017	Beyond	
Capital Costs								
Water Transfer Station	\$10,904,456							\$10,904,456
Main Transmission Line								
Transfer Station to Consort	\$32,661,444							\$32,661,444
Consort to Monitor				\$2,107,300				\$2,107,300
Monitor to Altario							\$4,746,950	\$4,746,950
Kirriemuir to Compeer							\$1,980,225	\$1,980,225
Brownfield Branch						\$3,390,725		\$3,390,725
North Line								
Transfer Station to Donalda			\$8,748,947					\$8,748,947
North Shore Branch						\$4,800,000		\$4,800,000
Donalda to Rosalind							\$6,159,140	\$6,159,140
Rosalind to Bawlf							\$2,869,230	\$2,869,230
Meeting Creek Branch							\$1,570,725	\$1,570,725
Tillicum Beach Branch							\$2,879,663	\$2,879,663
Big Valley Branch		\$6,317,068						\$6,317,068
Buffalo Lake Branch					\$2,756,000		\$0	\$2,756,000
	\$43,565,899	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725	\$20,205,933	\$91,891,872
Funding	*							
Water for Life								
Eligible Costs	\$42,755,507	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725	\$20,205,933	\$91,081,479
Funding Rate	90%	90%	90%	90%	90%	90%		
Grant	\$38,479,956	\$5,685,361	\$7,874,052	\$1,896,570	\$2,480,400	\$7,371,653	\$18,185,339	\$81,973,331
Commission Funding								
Share of Eligible Costs	\$4,275,551	\$631,707	\$874,895	\$210,730	\$275,600	\$819,073	\$2,020,593	\$9,108,148
Funding for Ineligible Costs	\$810,392	15 1 15	THE EX				4. 25° 52°	\$810,392
Total Commission Funding	\$5,085,943	\$631,707	\$874,895	\$210,730	\$275,600	\$819,073	\$2,020,593	\$9,918,540
	\$43,565,899	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725	\$20,205,933	\$91,891,872

Ultimately, the Commission is expected to borrow in nearly \$9 Million with annual repayment costs reaching nearly \$560,000 annually. Because of the magnitude of the expected borrowing, the Commission has received approval of the Minister of Municipal Affairs to exceed the Commission's allowed debt limit.

### Governance, Administration and Operation of the Commission

The Commission is governed by provisions of the *Municipal Government Act* and its bylaws. Each of the present 16 Members of the Commission is entitled to appoint a Director to the Board of the Commission and each Director is entitled to an equal vote regardless of size or type of municipality. The Commission has engaged the County of Stettler on a contractual basis to undertake the management and administration of the Commission and the operation of the System. Other provisions of the Plan address:

- the Commission's strategic direction, Business Planning process and policy areas on which the Commission will focus.
- expectations of Members and the contractual arrangements between the Commission and a Member
- administrative and financial procedures of the Commission

### **Operating Costs and Projected Rates**

The Plan includes an operating expenditure estimate for the period 2013 through to 2017. As well, the Plan provides a possible financial picture for year 2021, the year by which the much of the system will have been constructed.

	2013	2016	2021
			AND THE RESERVE OF THE PERSON
	Budget	Projected	Possible
Projected Volume of Water to Members (m3)	389,268	527,810	741,649
Cash Revenue			
Rates from Connected Members	\$871,960	\$1,182,294	\$1,804,371
Interest Income, Dividends			
Town of Stettler - Water Transfer Station	\$43,500	\$46,163	\$50,967
<b>Direct Contributions from Members</b>			
Governance and Administration	\$169,850	\$89,207	\$97,971
Debenture Costs	\$230,979	\$357,821	\$558,064
Total Revenue	\$1,316,289	\$1,675,485	\$2,511,373
Cash Expenditures			
Governance and Administration	\$169,850	\$89,207	\$97,971
Purchase of Water	\$590,512	\$756,157	\$1,173,096
Transmission Lines O and M	\$212,500	\$273,483	\$421,987
Transfer Station O and M	\$80,700	\$103,859	\$160,256
Transfer to Reserves	\$0	\$75,000	\$100,000
Debenture Debt Payments	\$230,979	\$357,821	\$558,064
Total Expenditure	\$1,284,540	\$1,655,527	\$2,511,373
Operating Fund Cash Surplus (Deficit)	\$31,749	\$19,957	\$0

Through the next five year period, the expected rate will remain at present levels of \$2.24 per cubic meter. This represents a significant increase from the \$1.90 / m3 rate projected in the initial business plan. This increase is due primarily to a lowering of expected sales volumes. Recent actual volumes have been only about 70% of the initial forecasts due in part to wetter than average summer weather and also to lesser use per person and reduced growth rate in some of the communities. Even with the completion of the full system in 2021, the expected rate, at about \$2.45 / m3, is not significantly higher than present levels. These rates, however, do not include the governance and administration costs of the Commission or the debenture debt repayment costs, both of which are recovered from the Members through direct contributions. If all of these costs were included in the rates, the rates would be \$.80 to \$.90 higher.

For comparison, present rates from other regional water systems have been included, though these must be approached with caution as circumstances of each system will be unique.

Mountain View - \$1.30 Westlock - \$1.85 Aspen - \$2.95 Shirley McClellan - \$2.24 Barrhead - \$1.80 North Red Deer - \$2.05 Highway 12/21 - \$2.35 Agua Seven - \$3.10

### **Risks and Barriers**

As to the completion of the rest of the stages of the System, the approach laid out in the Business Plan, relying as it does on the 90/10 funding levels of the Water for Life program, allows the development of much of the System over an 8 year period with water rates that, while high, are acceptable and affordable. If there is a delay in receiving Water for Life funding (or a similar magnitude of alternative funding from provincial or federal government sources) or the funds are simply unavailable for any of the subsequent stages of System development, the Commission would not be able to proceed with the planned construction. Already needing Ministerial approval to borrow its 10% share or current projects, the Commission would simply be unable to carry the significant amount of capital borrowing that would be needed.

For those Members with existing systems, these communities would need to continue using their existing sources of water supply until the regional source becomes available. For some, this may be possible without serious implication. For others, however, the adequacy of existing systems in terms of quantity and quality will be such that the status quo would not be an option. Where water quality and safety with existing supply are an issue, there would be no alternative but to undertake improvements to existing water supply systems in order to bridge the gap until a regional supply arrives. If present systems do not have the quantity of water needed, then the alternative would be that future growth and development in the communities, a feature of great importance to future viability of municipalities in East Central Alberta, would have to stop. In cases where Members had planned new distribution systems to serve existing hamlet and rural populations and provide an alternative to private dependence on depleting or undrinkable groundwater sources, these initiatives could not go ahead.

### Conclusions

To meet the needs of the urban and rural communities for a long term assured supply of safe water, the municipalities in East Central Alberta as Members of the Commission have set out a plan for the continued development of the complete System. Significant funds, nearly \$60 Million, have already been expended or committed with 90% of these costs funded by the Government of Alberta. The Members, through the engineering studies completed, in working closely with provincial departments and with the consultants and with the management team engaged have concluded that the Shirley McClellan regional system is most viable and practical way to provide for the long term water needs of the municipalities and their citizens. The Business Plan sets out how this will be achieved. The operation of the system and its continued construction and development will be expensive and but the Commission believes that the cost will be affordable water. However, the Plan clearly identifies that future development of the remaining parts of the System will only be financially possible with a continuation of the significant level of provincial funding support that has been received to this point.

### 1. Introduction

#### 1.1 Definitions

In this Plan:

- i) "Commission" means the Shirley McClellan Regional Water Services Commission established by Alberta Regulation AR 212/2007
- ii) "Director(s)" means the representative or representatives of the Members duly appointed to the Board,
- "Member" means one of the Members in the context of membership of the Commission,
- iv) "Members" means those municipalities identified as Members of the Commission under Alberta Regulation AR 212/2007,
- v) "Paintearth County" means the County of Paintearth No. 18
- vi) "Plan" means the Shirley McClellan Regional Water System Business Plan,
- vii) "Stettler County" means the County of Stettler No. 6
- viii) "Stettler WTP" means the Water Treatment Plant owned and operated by the Town of Stettler
- ix) "System" means the Shirley McClellan Regional Water System developed by the Commission,
- x) "System Completion Plan" means the Shirley McClellan Regional Water System Completion Plan, prepared by the Commission to detail further the completion of the remaining components of the System.
- xi) "System Service Area" means the geographic area set out in Figure 2.1 within which the System would undertake to provide water services.

### 1.2 Project Background

### 1.2.1 Water Needs and Challenges of Supply

By the beginning of this century it was becoming evident to the municipalities in the East Central Alberta region that the dual impacts of a series of dry years and the demands of growth and development were putting extreme pressure on the existing ground and surface water supplies. With the prospect of continuing growth arising primarily from continuing expansion of the energy industry, these Municipalities recognized the need to ensure a long term water supply for the region's population and communities.

The Government of Alberta also recognized the importance of planning for the long term future of water supply and, in its Provincial Water Strategy, set out the goals of ensuring:

- The safety and security of the drinking water supply
- Healthy aquatic ecosystems

• Reliable, quality water supplies for a sustainable economy

The circumstances of water supply in the municipalities throughout the East Central Alberta region and the challenges that each face are varied:

- 1. Groundwater availability in terms of quantity and quality is highly variable.
  - a. For some, there is limited quantity and evidence of dropping groundwater levels. Continued long term use of local aquifers is clearly unsustainable.
  - b. For others, the water that is available is below acceptable standards and, in some cases, of concern with respect to long term health and safety. The costs of putting in place local treatment solutions is collectively expensive for the region and beyond the financial abilities of some municipalities
  - c. In some locations in the region, groundwater is not available at all.
- 2. Using surface water as a source is problematic because its availability is highly unpredictable.
  - a. The dry years that characterized the area up to 2009 have been replaced by a number of wet seasons which have replenished surface water bodies. However, a quick return to dry conditions is entirely possible.
  - b. Surface water requires treatment and, in some cases, significant treatment to achieve acceptable quality and meet drinking water standards. The cost of treatment is expensive and, in small scale setting, prohibitively so.
- 3. Some municipalities are reaching the threshold were existing supply systems need to be expanded to provide additional capacity for the future and upgraded to meet rising standards. These municipalities have as options the renewal themselves of these stand-alone supply systems at significant cost or drawing from a potentially cost effective regional supply.
- 4. There remain significant numbers of population in the region which must rely on private solutions for the supply of water. In some hamlets, there is sufficient development to justify a public water distribution system but an insufficient local source of water to supply such a new distribution system.

- 5. In the region's rural municipalities, there are significant areas where groundwater supply is limited in quantity, of unusable quality or simply non-existent. Piped rural water distribution systems would provide the necessary potable water to ensure that these areas can remain populated and viable into the future but these piped systems require a long term, sustainable supply of water.
- 6. The region also includes Buffalo Lake which is described in the Buffalo Lake Intermunicipal Development Plan as "one of the largest water bodies in Central Alberta, [and] an important amenity for the region providing year-round recreational opportunities. Buffalo Lake offers publicly accessible shorelands, valuable natural landscapes, healthy and sustainable fish and wildlife populations, and "lake-side" living opportunities. The Lake is not only important due to its recreational amenities, but also because of its biodiversity and extensive wildlife habitat areas. The popularity of Buffalo Lake has grown over the years and continues to be discovered by nature enthusiasts, new recreational users, part-time and full-time residents, and developers.

The development of piped water distribution system in the identified development areas around the Lake in combination with the development of a public wastewater collection and treatment systems will be vital to ensure the continued environmental integrity of the Lake and a healthy aquatic ecosystem. The Lake itself cannot provide the supply for these water distribution systems and as such an alternative long term source of water is required.

### 1.2.2 Regional Approach and Development of Water Supply System

It remains the objective of the Province to encourage the development of major regional water treatment facilities citing advantages of:

- a. Gaining of economies of scale in lowering per unit treatment costs generally and in consideration of higher levels of treatment,
- b. Better opportunity to attract, retain and develop expertise in operations staff, and
- c. Fewer treatment facilities to upgrade to meet both present and future environmental standards and public health and safety requirements.

A regional solution for the Municipalities was considered initially as part of a larger Eastern Alberta regional water supply concept which envisioned a system for the region supplied by an expanded Stettler WTP. Neither Alberta Environment nor Alberta Transportation would consider the development of a new water treatment facility when there was the opportunity to develop a single regional supply hub. Based on a scarcity of groundwater of adequate quantity

and acceptable quality throughout the region, provincial government objectives and requirements and capital funding programs available, the Municipalities concluded that a regional approach centered on supply from the Red Deer River would be the most advantageous in meeting the long term water supply needs of all of the Municipalities.

Due to a sudden supply problem at Alix in 2005, the Town of Bashaw, the Villages of Alix and Clive and Lacombe County chose to move forward on their own to develop a water supply system to meet their respective needs and proceeded with the development of the Highway 12/21 Regional Water System. In 2007, Camrose County and the Villages of New Norway, Ferintosh and Edberg also joined the Highway 12/21 Commission.

With the exception of Gadsby and Botha which at that time were supplied from the Town of Stettler, the remaining municipalities in the east central Alberta region have proceeded to develop a separate regional system, the Shirley McClellan Regional Water System. This System is to be supplied in the long term by the Stettler WTP.

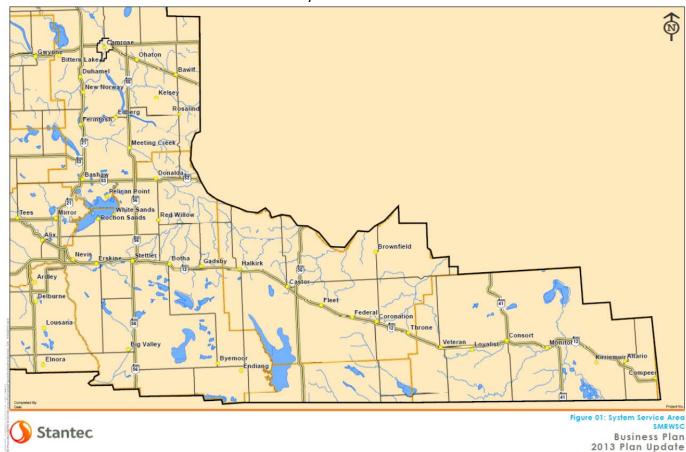


Figure 2.1
System Service Area

### 1.3 Business Plan Objectives and Scope

This Plan is intended to set out how the development of the System will continue to be implemented, how the System will be managed and operated and the expected revenues, expenditures and rates.

Specifically, the Plan will:

- 1. Identify the expected volumes of treated water to be required by the Members over the 25 year period ending 2032,
- 2. Describe the areas to be served to be served by the System, how the System has been developed to this point, and the stages in which the remainder of the System would be constructed,
- **3.** Describe the governance and administration of the Commission and the responsibilities of the Members,

- 4. Set out the capital costs and financing of the System construction to date and the expected costs and sources of financing for the remainder of the System's development.
- 5. Set out the expected operating costs of the System for the years 2013 2017, and
- **6.** Project the rates to be charged for water services and the contributions required of the Members.

As well, the Plan will become part of the "corporate memory" of the Commission and be a reference and resource for present and future Board Directors, Commission management and administration and the Members as well a source of information for funding and regulatory agencies and for the general public.

The Plan was originally prepared and adopted in 2011. Revisions were prepared in the summer of 2013 and adopted by the Commission on September 25, 2013 to:

- a. update the progress of the System's development,
- b. adjust the areas to be served by the System and re-address timing and priorities of the development of the remaining components of the System,
- c. update capital costs, and
- d. include recent operating and financial information.

### 1.4 Previously Completed Studies, Plans and Reports

Studies, plans and reports considered in preparation of this Plan include:

- East Central Alberta Regional Water Service Committee Concept Refinement Report (Stantec Consulting Ltd. April 2006)
- 2. Camrose County Water Supply Feasibility Study Final Report (Stantec Consulting Ltd. November 2006)
- 3. Shirley McClellan Regional Water Services Commission Consolidated Financial Statements for the Years ended December 31, 2008, 2009 and 2010 (Gitzel Krejci Dand Peterson)
- 4. Buffalo Lake Intermunicipal Development Plan (2011)
- 5. Buffalo Lake South Shore Intermunicipal Development Plan (2013)

### 2. Governance and Management

### 2.1 Operation and Business Entity

Of the various governance options examined, the Municipalities have chosen to form a regional services commission under the provisions of Part 15.1 the *Municipal Government Act*, R.S.A 2000, c. M-26. At the request of the Municipalities, the Government of Alberta by way of Alberta Regulation AR 212/2007 created the Shirley McClellan Regional Water Services Commission. The Commission is authorized "to provide and operate a water supply system." (See Appendix A for Consolidated Regulation)

### 2.2 Organization of the Commission and Governing Board

### 2.2.1 Governing Bylaws

The organization and constitution of the Commission is set out in Commission Bylaws 5-12 and 7-12 (the Bylaws), adopted by the Board and the latter approved by the Minister of Municipal Affairs. The Bylaws are included in Appendix B.

#### 2.2.2 Commission Board

With the amendments to the Bylaws in Section 2.2.1, the Board is composed of sixteen (16) Directors, one (1) from each of the municipal councils of the sixteen Members.

The Board is "responsible for the management and conduct of the affairs of the Commission." A Chair and Vice Chair is selected annually by the Board from among its members.

By bylaw, the Board is required to hold, at minimum, two meetings per year. During construction and initial operational periods of the stages of the System, the Board will meet more often as may be required.

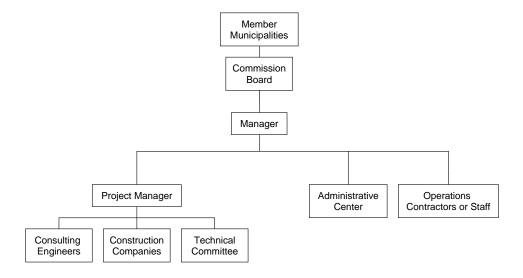
### 2.3 Management

Bylaw No. 6-11 provides for the position of a Manager appointed by the Board to act as the ongoing "administrative head of the Commission." The Board may select as Manager an individual who is an employee of the Commission or the Board may choose an individual, municipality or firm to act on a contracted basis. The Manager will direct operational employees or contractors and the administrative center for the System.

To oversee, coordinate and direct capital construction of the stages of the System, a Project Manager will be engaged. The Project Manager will direct the Consulting Engineers engaged by the Board and any Project / Construction Manager or Managers that may be required. The Project Manager will also chair any technical committee that may from time to time be required. The committee would include representatives from each of the Members and representatives of the Town of Stettler. The committee will provide input and advice on the design and construction of the System, as well as provide liaison between the System and the water facilities and staff of each of the Members and Stettler WTP. The costs of the Project Manager shall be considered a cost of the particular capital project.

### 2.4 Organization Chart

Figure 2.2 Shirley McLellan Regional Water Services Commission Organizational Chart



### 2.5 Allocation of System Capacity and Costs

Each Member agrees that:

1. The system capacity allocated to the Members is set out in Table 2.1. This allocation has been based on the proportional projected annual treated water volumes for each member at the end of the 25 year design capacity of the System, in the year 2032, to which the Members had committed.

Table 2.1
Shirley McClellan Regional Water System
Allocation of System Capacity Based on
25 Year Design Treated Water Volume

	Per Bylaw	6-11
	Volume Year 2032	%
	20000	
Camrose County	624,554	12.3%
Lacombe County	100,000	2.0%
Paintearth County	504,515	10.0%
Stettler County	1,844,291	36.4%
Town of Castor	292,805	5.8%
Town of Coronation	336,334	6.6%
Village of Bawlf	110,048	2.2%
Village of Big Valley	106,474	2.1%
Village of Consort	198,544	3.9%
Village of Donalda	72,027	1.4%
Village of Halkirk	36,500	0.7%
Village of Rosalind	61,430	1.2%
Village of Veteran	91,443	1.8%
SV of Rochon Sands	78,840	1.6%
SV of White Sands	74,724	1.5%
Special Areas 2, 3 and 4	531,691	10.5%
	5,064,220	100.00%

- 2. In the long term, all annual costs including those for governance and administration, treated water purchase, System operation, capital development and debenture repayment costs will be recovered through uniform rates levied on actual volume of water delivered, subject to such minimum annual payments as may be required to address less than expected volumes of water sales.
- 3. Notwithstanding clause 2 above, until such time as all of the Members are drawing water substantially from the System, the following cost sharing and recovery approach shall be used:
  - a. Governance and Administration Costs will be shared equally among the 16 Members and will be paid by the Member directly to the Commission.
  - b. Debenture Debt Repayment Costs and Contributions to Capital Reserves will be shared among the Members on a basis proportionate to the allocation of System Capacity in Table 2.1. This proportionate share will be paid by the Member directly to the Commission.

- c. System Operations Costs including the costs of purchasing treated water, the costs associated with operation and maintenance of the transmission system and Water Transfer Station and any transfers to operating reserves, will be recovered through uniform rates levied on actual volume of water delivered, subject to such minimum annual payments as may be required to address less than expected volumes of water sales.
- 4. The Members agree that should the uniform rate, because of less than expected water volumes, fail to generate sufficient revenue to meet the total annual costs, the shortfall of revenue, if it cannot otherwise be met from financial reserves or accumulated surplus, would be recovered in subsequent years by an increase in uniform rates.

### 2.6 Member Water Supply Agreement

Each Member requiring water services from the System will be required to enter into a Member Water Supply Agreement with the Commission which will, among other things, set out the:

- a. Financial obligations of the Member for payment for:
  - i. Water services on a volume basis,
  - ii. Minimum annual charges required, if any,
  - iii. Subsequent recovery of revenue shortfall for previous years, and
  - iv. Special Services required by the Member, if any.
- b. Arrangements, obligations or provisions with respect to the supply of services that may be particular to the Member,
- c. Annual Quantities to be delivered to Member in each year.
- d. Obligations for Minimum Annual Volumes,
- e. Allowable Daily Volume and Maximum Rate of Delivery of water to the Member,
- f. Obligations of the Member with respect to connection with the System, environmental compliance and indemnification,
- g. Provisions for suspension and shutdown of the Members Connection, and

h. Process for Dispute Resolution.

A draft template of the Water Supply Agreement is set out in Appendix C. Agreements are in place for the following Members:

- i. Town of Castor
- ii. Town of Coronation
- iii. Village of Consort
- iv. Village of Halkirk
- v. Village of Veteran
- vi. Paintearth County
- vii. Stettler County
- viii. Specials Areas

Agreements will be completed with the Villages of Big Valley and Donalda once water services from the Big Valley Branch and the North Line respectively are available.

#### 2.7 Addition of New Members

The Commission may consider an application from a Municipality in the System Service Area for membership in the Commission on terms and conditions that the Commission may determine provided that the present and future water needs of the present Members are not adversely affected.

A new Member would be required to enter into an agreement with the Commission which among others things would provide that the new Member pay to the Commission a Membership fee which would include:

- a. a portion of the net capital costs of the System based on the proportion of expected water volume to total System volume, and
- b. compensation reflecting the costs and efforts incurred by the Members in establishing the Commission and bringing the System to operation.

Once the Membership Agreement has been executed, the Commission will request the Minister of Municipal Affairs to amend *Alberta Regulation* AR 212/2007 to include the municipality as a Member.

#### 2.8 Withdrawal of Members from the Commission

1. Subject to the approval of the Minister of Municipal Affairs, a Member may withdraw from the Commission upon two years written notice. The withdrawing Member may sell the equity contributed by the Member during the Member's term of membership in the Commission to any other Member of the Commission for such compensation and on such terms as the parties may agree, subject to the approval of

the Board. However, the Commission or any Member shall not be obligated to purchase the withdrawing Member's proportionate share of the system. The Commission shall not utilize the capacity of the system related to the withdrawing Member's equity or utilize the withdrawing Member's water volume allocation without fair compensation.

2. The withdrawing Member shall still be responsible for any respective proportion of outstanding debt principle for which the Member is responsible and the Member shall either pay the outstanding principle and any accrued interest to the Commission or agree to continue to pay the respective share of the annual payments on the debt. Any proceeds to the Member from the sale of capacity under clause 1) shall be firstly applied to outstanding debt principle of the Member.

### 2.9 Disposition of Assets

The Commission Board may dispose of assets of the Commission provided that:

- a. Grants from the Government of Alberta and outstanding debt associated with that portion of the land, buildings, equipment or inventory to be sold is repaid or retired,
- b. The sale would not have a significant adverse effect on the services the Commission provides,
- c. The sale will be properly reflected in the rates subsequently charged to the customers of the Commission, and
- d. Approval of the Minister is obtained for any disposition that has been funded by the Government of Alberta.

### 2.10 Business Planning

### 2.10.1 Strategic Directions

- 1. The primary consideration for the Commission is to continue with the development of the System to serve all of the Members with the specific intention of completing much of the overall System within a 10 year time frame. The timing for the completion of some components will remain to be determined based on need
- 2. While the Commission's primary obligation is to its present Members, the Commission will consider an expansion of the System service area or the addition of new members or both, as an opportunity to reduce future operating and capital costs to existing members provided,

however, that the long term interests of the Members and the Commission are not prejudiced.

3. The Commission is intent on maintaining the System under the jurisdiction and control of the Members through the organizational structure of the regional services commission. The Commission will seek out such opportunities for cooperation, alliance and combination with other public water systems as means to enhance management, administration, operations, development and security of water supply of the System.

### 2.10.2 Review of Plan

The Commission will review the provisions of this Plan each year as part of the cycle for preparing the financial plans and annual budget for the Commission. The Commission will undertake a more extensive, full review of the Plan:

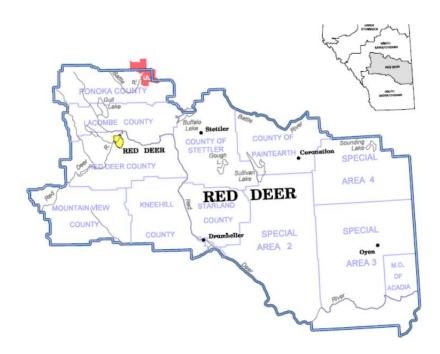
- a. In the year following the year in which local elections are held, beginning in 2014, or
- b. More frequently if the Commission determines a need to do so.

#### 2.10.3 Compliance with ALSA Regional Plans

Under the provisions of Section 602.021 of the Municipal Government Act (supra), a regional commission "must act in accordance with any applicable ALSA [Alberta Land Stewardship Act, S.A. 2009, c. A-26.8] regional plan. The ALSA provides for the implementation of the Alberta Land Use Framework under which the following regions in which the System will operate have been identified as regions for which a land use plan will be a requirement.

#### **Red Deer Region**

At this time, the Red Deer Regional Land Use Plan is not under development.



The Commission will monitor and participate in the development of the Red Deer Region Land Use Plan to the extent necessary to safeguard and advocate for the long term water supply interests of the Commission. The Commission will consider participation in other municipal and multi-stakeholder groups such as the Red Deer River Municipal User Group or the Red Deer River Watershed Alliance that are concerned with the management and planning of the Red Deer River and its role in the larger South Saskatchewan River Basin.

#### North Saskatchewan Regional Plan

The northern portion of the System Service Area lies within the Battler River sub-basin which is part of the North Saskatchewan River Basin. At this time, the North Saskatchewan Regional Land Use Plan is not under development. The Commission will monitor and participate in the development of this regional land use plan to the extent necessary to safeguard and advocate for the long term water supply interests of the Commission.



### 2.10.4 Public Policy

To ensure the long term water supply interests of the Commission and its Members, the Commission will remain aware of and participate in the consideration and public debate with respect to the following policy issues including:

- a. Development and coordination of water supply systems within a larger regional context,
- b. Protection of watersheds and sources of water for municipal supply systems, and
- c. The allocation and licensing of surface water supplies by the Government of Alberta.

### 3. System Description

### 3.1 Communities Served and Overview of System

The area to be served by the System is set out on Figure 2.1 earlier and includes the municipalities of:

Camrose County

Village of Consort

Village of Donalda

County of Paintearth No. 18

Village of Halkirk

County of Stettler No. 6

Village of Rosalind

Village of Veteran

Town of Coronation

Summer Village of Rochon Sands

Village of Bawlf

Summer Village of White Sands

Village of Big Valley Special Area No. 2, 3 and 4.

### 3.2 System Capacity

The capacity to which the System is to be constructed is based on the peak day water requirements of the estimated population of the System Service Area for the 25 year period ending in year 2032. This capacity is summarized in Table 3.1 in two parts below.

### 3.2.1 Population Projections

The detailed projected populations over a 25 year time frame for each of the Municipalities starting in 2007, is set out in Appendix D, Table D1. Because of the implications for provincial grant funding, the population projections for the urban municipalities and the rural municipalities are addressed separately. The average annual growth rate has been set at 3% for most urban municipalities and hamlets. The Villages of Bawlf and Rosalind in Camrose County were increased by 3.5% annually while the Camrose County hamlets have been increased by 2% annually.

Table 3.1
Shirley McClellan Regional Water System
Summary of 25 Year Water Flows
Year 2032

	Danulation	Volume in m3		0/	Peak Day	Peak Volume	
	Population	Per Day	Per Year	%	Factor *	m3 / day	ltrs/sec
<b>Urban Municipalities</b>	9	-					
Town of Castor	2,139	802	292,805	5.8%	2.5	2,006	23.2
Town of Coronation	2,457	921	336,334	6.6%	2.5	2,304	26.7
Village of Bawlf	949	304	110,847	2.2%	2.5	759	8.8
Village of Big Valley	778	292	106,474	2.1%	2.5	729	8.4
Village of Consort	1,451	544	198,544	3.9%	2.5	1,360	15.7
Village of Donalda	526	197	72,027	1.4%	2.5	493	5.7
Village of Halkirk	268	100	36,640	0.7%	2.5	251	2.9
Village of Rosalind	531	170	61,994	1.2%	2.5	425	4.9
Village of Veteran	668	251	91,443	1.8%	2.5	626	7.2
SV of Rochon Sands	577	216	78,916	1.6%	2.5	541	6.3
SV of White Sands	546	205	74,724	1.5%	2.5	512	5.9
	10,889	4,002	1,460,747	28.8%		10,005	115.8
Rural Municipalities							
Lacombe County							
Future Use		274	100,009	2.0%	2	548	6.3
Total Lac County	-	274	100,009	2.0%		548	6.3
Camrose County							
Hamlets							
Meeting Creek	64	25	9,284	0.2%	2.5	64	0.7
Pelican Point	2,810	1,124	410,269	8.1%	2.5	2,810	32.5
Tillicum Beach	223	89	32,494	0.6%	2.5	223	2.6
Kelsey	50	20	7,330	0.1%	2.5	50	0.6
Total Hamlet	3,146	1,259	459,377	9.1%		3,146	36.4
Rural	2,585	452	165,144	3.3%	2	905	10.5
Total Cmrs Cnty	5,732	1,711	624,521	12.3%		4,051	46.9
Paintearth County							
Hamlets							
Fleet	57	21	7,829	0.2%	2.5	54	0.6
Brownfield	69	26	9,395	0.2%	2.5	64	0.7
Total Hamlet	126	47	17,224	0.2%	2.5	118	1.4
Total Hailliet	120	4/	17,224	0.5%		110	1.4
Rural	3,816	1,336	487,528	9.6%	2	2,671	30.9
Total Pnrth Cnty	3,942	1,383	504,751	10.0%		2,789	32.3

Table 3.1
Shirley McClellan Regional Water System
Summary of 25 Year Water Flows
Year 2032

	Danulation	Volum	e in m3	%	Peak Day	Peak Volume	
	Population -	Per Day	Per Year	%	Factor *	m3 / day	ltrs/sec
Stettler County	32						
Hamlets							
Nevis	69	26	9,395	0.2%	2.5	64	0.7
Erskine	805	302	110,232	2.2%	2.5	755	8.7
Red Willow	80	28	10,230	0.2%	2.5	70	0.8
Total Hamlets	954	356	129,857	2.6%		889	10.3
Rural							
Buffalo Lake	8,111	1,868	681,654	13.5%	2	3,735	43.2
North	3,967	1,309	477,831	9.4%	2	2,618	30.3
East	3,109	1,088	397,140	7.8%	2	2,176	25.2
South	2,468	432	157,657	3.1%	2	864	10.0
Total Rural	17,655	4,697	1,714,282	33.8%		9,393	108.7
Total Sttlr Cnty	18,609	5,052	1,844,139	36.4%	e 5	10,283	119.0
Special Areas 2, 3 and 4							
Hamlets							
Loyalist	11	4	1,566	0.0%	2.5	11	0.1
Monitor	156	58	21,295	0.4%	2.5	146	1.7
Kirriemuir	64	24	8,768	0.2%	2.5	60	0.7
Altario	46	17	6,263	0.1%	2.5	43	0.5
Compeer	46	17	6,263	0.1%	2.5	43	0.5
Total Hamlets	323	121	44,156	0.9%		302	3.5
Rural	3,816	1,336	487,528	9.6%	2	2,671	30.9
<b>Total Spec Areas</b>	4,139	1,457	531,683	10.5%		2,974	34.4
Total	43,311	13,879	5,065,851	100.0%		30,650	354.7
* Peaking factors used:	Urban	2.5					
r canning ractors asea.	Rural	2					

The population rate of increase for the Summer Village of White Sands is established at 6%. The rate for Pelican Point was set at 18% annually to bring population to the maximum allowed under the Buffalo Lake Area Structure Plan by year 2032 (see below).

The future populations for the rural municipalities are substantial in comparison to the urban centers of the region. Because of the lack of groundwater sources in the region, the rural municipalities plan extensive these water distribution systems to rural settlements and sites.

By year 2032, the population is expected to rise to just over 40,000.

### 3.2.2 Projected Treated Water Volumes

The detailed projected daily and yearly volumes of treated water required by the projected population are set out respectively in Tables D2 and D3 in Appendix D. Generally a demand factor of 375 litres per person per day (lcd) has been used for urban density development. For the Villages of Rosalind and Bawlf a factor of 320 lcd is used. Consumption rates in the Hamlets vary from a low of 350 lcd to a high of 400 lcd.

Projected rural consumption rates range from 175 lcd for Camrose County and portions of Stettler County to 350 lcd in Paintearth County and other areas of Stettler County. The volume attributed to Lacombe County has been an arbitrary amount of 100,000 m3.

By year 2032, the total average daily demands for the System are expected to rise to nearly 14,000 cubic meters (m3) per day or about 5.0 Million m3 per year. It is noted that the annual volumes for each Member in Table 3.1 are determined by way of arithmetic calculations of interlinked spreadsheets and may vary slightly from the annual volumes set out in Table 2.1 which is based on the original Bylaw No. 1 and reflected in new Bylaw No.6-11. For the purposes determining allocated volumes and proportionate share of capital costs in this Plan, the volumes in Table 2.1 shall be used

The detailed maximum day demands for treated water are set out in Table 3.1. These volumes are based on a peaking factor of 2.5 times the annual average day flow for urban municipalities and hamlets and 2 times the annual average day for rural uses. The maximum daily flow in year 2032 is forecast at about 30,650 m3.

While the average per capita water consumption rates are used uniformly throughout the 25 year forecast period, it is expected that the average annual daily demand will decrease over time with tighter distribution systems, more efficient fixtures and general awareness and conservation stewardship among the populations. Conservation and stewardship policies and initiatives of the System which are reflective of the Alberta Environment Conservation Policy will encourage users to individually reduce long term water use.

### 3.2.3 Buffalo Lake

The Buffalo Lake Area Intermunicipal Plan (BLIDP) establishes development limits for individual growth nodes around the Lake. As well, Stettler County and the Summer Villages of Rochon Sands and White Sands have adopted the Buffalo Lake South Shore Intermunicipal Development Plan (SSIDP) which addresses further the planning of the South Shore. The development limits and resultant water needs are summarized in Table 3.2 Regional water needs for

the northeast, east, and south shore areas would be provided by the Commission while the south west, west and northwest shore needs would be provided by the Highway 12 / 21 Regional Water System. With the exception of the North Shore (Pelican Point) area, the projected maximum water requirements exceed the present System capacity allocations to the Members. The need for additional volume allocations to respective Members if required to enable the maximum entitled development would need to be addressed in the future by the Commission.

CAMROSE COUNTY

Bashaw Bay
Cowth Node

COUNTY

Lake Bend Rd.

BUFFALO LAKE

Crowth Node

South Shore
County

The Narrows
Crowth Node

South Shore
County

Typ, Rd. 402

STETTLER
COUNTY

STETTLER
COUNTY

STETTLER
COUNTY

STETTLER
COUNTY

STETTLER
COUNTY

STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
STETTLER
COUNTY
S

Figure 3.1
Buffalo Lake Development Areas

Table 3.2 Shirley McClellan Regional Water System Buffalo Lake Statutory Plans Growth Node Development Limits

		Volume					
	Max	ximum Popula	tion		Volume Estimat	ions	Provide in
	Maximum	Avg Persons	Estimated	Per Capita	Avg Annual	Max Annual	Established
	Units	Per Unit	Population	Daily Vol	Daily Flow	Volume	Allocations
				(lcd)	(m3)	(m3)	Table 2.1, 3.1
Shirley McClellan Regional W	ater System						
South Shore							
Stettler County	3,020	2.5	7,550	375	2,831	1,033,406	681,654
SV of Rochon Sands	330	2.5	825	375	309	112,922	78,840
SV of White Sands	454	2.5	1,135	375	426	155,353	74,724
North Shore							
Camrose County	1,215	2.5	3,038	375	1,139	415,758	410,269
	5,019		12,548		4,705	1,717,439	1,245,486
Highway 12/21 Regional Wat	er System						
The Narrows							
Lacombe County	629	2.5	1,573	375	590	215,236	100,000
Lake Bend	025	2.0	2,0.0	0.0	330	223,233	200,000
Lacombe County	1,277	2.5	3,193	375	1,197	436,973	
Bashaw Bay							
Camrose County	405	2.5	1,013	375	380	138,586	
	2,311		5,778		2,167	790,795	
	7,330		18,325		6,872	2,508,234	

### 3.3 Supply of Treated Water

#### 3.3.1 Water Supply

The System will be supplied with treated, potable water from the Stettler WTP on a volume purchase basis in accordance with the terms of a long term supply agreement with the Town of Stettler. The capacity of the Stettler WTP has been increased in 2010 to accommodate the additional short term water needs of the Shirley McClellan Regional Water System and Highway 12/21 Regional Water System in addition to those of the Town of Stettler system. This expansion has given the plant a rated capacity of 12,000 m3 per day. With modifications, the plant capacity could be raised to about 20,000 m3 per day.

In 2011 the water demands on the plant from the three systems ranged from 4,000 to 5,000 m3 per day. At this point, the Stettler WTP has not had to meet the demands of a dry spring or summer and so a history of peak day demands

has not been sufficiently established. However, a peak of 7,000 m3/day to meet the currently connected systems may be expected.

The 25 year average daily demand for the Town, Shirley McClellan and Highway 12/21 Systems is estimated at about 24,000 m3. At peak day demand of 1.8 times average daily demand, the peak day volume demand on the Stettler WTP would be upwards to 42,000 m3/day. To meet the ultimate requirements of three systems the Stettler WTP will need to be expanded and the Commission will need to address the nature and timings of these expansions with the Town of Stettler and the Highway 12/21 Regional Water Services Commission.

### 3.3.2 Supply Agreement with the Town of Stettler

The Commission has entered into a 30 year term agreement with the Town of Stettler, dated November 15, 2007 and expiring that date in 2037, for the supply of treated water to the Commission for the transmission through the System to the Members. Among other things, the Agreement provides:

- a. For the provision of treated water for normal domestic and municipal purposes,
- b. That the Commission shall get all of its water requirements from the Town of Stettler unless the Town of Stettler can not provide the amount of water needed.
- c. A process of setting quantities of water to be supplied each year to the Commission,
- d. That the Town will use its best efforts to provide the water to meet the agreed upon Annual Quantity forecast to be needed by the System and to provide for peak day demands up to 1.8 times the average daily demand calculated from the Annual Quantity.
- e. That rates for the supply of water be calculated based on a Utility Rate Model basis or according to the principles and practices agreed to by the Commission and the Town
- f. A process to establish rates for treated water services.
- g. For the respective obligations of the Commission and the Town for the metering, control and monitoring of the delivery of water to the System.
- h. Provisions to address emergency suspension of water services or temporary reductions in volume of water available,
- i. That the Commission will accept the water as fluoridated

- j. A Joint Steering Committee of representatives of the Commission and the Town of Stettler to ensure strategic planning, consultation and communication.
- k. Processes for Dispute Resolution.

While not provided for specifically in the agreement, the Commission and the Town of Stettler undertake annually a process referred to as "true up" which adjusts the established rate for a year (which was based on estimated costs and volume) for actual costs and volume incurred in the year.

The supply agreement sets out a process to identify the Annual Quantity of water that the Commission will require each upcoming year. The Town of Stettler will use its "best efforts" to supply this Annual Quantity and may supply water in addition to this established Annual Quantity if the Town of Stettler is able. The agreement does not specifically identify that the Town has the obligation to supply the 2032 volume of 5,064,220 m3 as identified in Table 2.1.

The cost of purchase of water is determined at a unit rate per cubic meter on actual recorded volumes of water supplied.

#### 3.3.3 Water License

The Commission holds license #00240586-00-00, dated July 23, 2009 from Alberta Environment authorizing the diversion of water from the Red Deer River for the System at the Stettler WTP for treatment and delivery to the System. The license has an expiry date of July 22, 2024.

The license authorizes a maximum diversion of 5,545,460 m3 per year, which slightly exceeds the full volume expected at the 25 year design capacity of the System as set out Table 2.1. Of the total licensed amount, 50% is authorized for inter-basin transfer, well in excess of the volume expected to be required in the northern sections of the System Service Area.

As Members connect to the System, the Member's existing groundwater licenses will be relinquished by those Members.

### 3.3.4 Inter-basin Transfer of Water

The System is supplied by water from the Red Deer River which is part of the South Saskatchewan River System. The northern portions of the System service area are within the drainage area of the Battle River which is part of the North Saskatchewan River System. As such, water provided to portions of Stettler County, to Camrose County and to Members north must be authorized by the Government of Alberta legislation as an interbasin transfer. Of the System's

total year 2032 annual volume of 2.1 Million m3, 650,000 m3 per year would transfer from one basin to the next.

Authorization to transfer from the South Saskatchewan River basin to the North Saskatchewan River Basin was initially given under the Stettler Regional Water Authorization Act, SA 2005 c.S-19.5. That legislation was subsequently repealed and replaced by the East Central Regional Water Authorization Act, SA 2007 c. E-0.2 (Copy in Appendix E) which authorizes the interbasin transfer of water for a much broader area including that area served by the Shirley McClellan Regional Water System. The total maximum transfer authorized is 10,800 cubic decameters (10.8 Million m3) annually. Though a volume is not specifically attributed in the legislation to the Shirley McClellan System, the volumes authorized far exceed the projected transfers of the Shirley McClellan System and the Highway 12 / 21 Regional Water System.

#### 3.4 Water Transfer Station

The point at which the System purchases water from the Town of Stettler is at the Commission's Water Transfer Station, the System's reservoir and pumping facility located just west of the Town of Stettler. The Town of Stettler's supply line from the Stettler WTP discharges into the reservoir at the facility and water is then re-pumped through separate sets of pumps to supply the Town of Stettler and the System's eventual three transmission lines.

The current capacity of the supply line to the Water Transfer Station is about 260 litres per second (l/s). The peak capacity required for the 25 year volume of the System plus that of the Town of Stettler would be upwards to 380 l/s. At some point in time the capacity of the supply line will need to be increased, likely by twinning the line.

#### 3.4.1 Transfer Station Agreement with the Town of Stettler

The Commission and the Town of Stettler have entered into an agreement with respect to the use of the Commission's Water Transfer Station for improving supply of water to the Town's distribution system. Similar in structure to the agreement for the purchase of water from the Town of Stettler, the Transfer Station Agreement provides:

- a. A 30 year term
- b. That each party is responsible for the operations, maintenance, replacement and costs of service for their respective transfer pumps
- c. That the parties will share on a proportionate volume basis the common costs

- d. The Town of Stettler will be charged for its respective costs on rate per unit of volume basis
- e. A Process for establishing the rate to be charged to the Town of Stettler and for a "true up" process at the end of the financial year.

### 3.5 Treated Water Transmission System

The regional water transmission system required to provide the 25 year volume of water to the communities and areas identified is set out in Figure 3.1 and described in the following sections. The alignment of the mains and branches of the transmission pipeline are conceptual only. The specific alignment has been determined for those portions constructed and will be determined for those portions yet to be constructed as part of the detailed engineering and right of way negotiation.

Greater details on the completion of the unconstructed components of the transmission system are set out in the System Completion Plan. Refinement of these concepts and the specification of materials will be determined during the detailed engineering design stage.

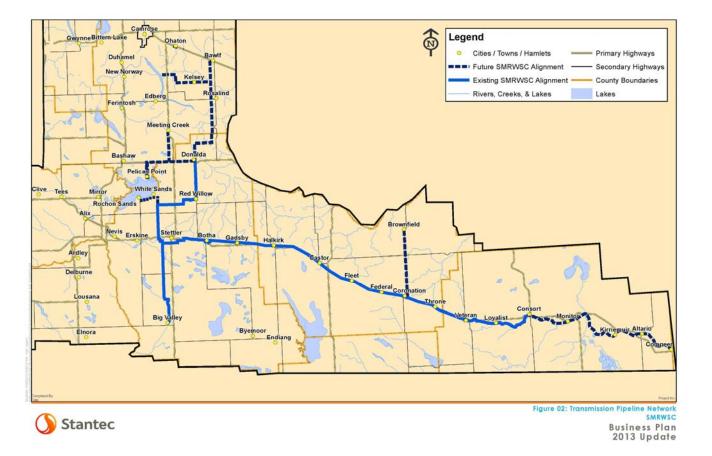


Figure 3.2
Transmission Pipeline Network

The pipeline segments, required capacities and construction timing are set out in Table 3.3 Details of the allocation of peak day volumes for the Members among the various Main line, North Line and Branch segments is set out in Table 4 of Appendix D.

The System will be constructed in stages and on a timing reflective of the

- a. availability of major grant funds from the Province, or
- b. limitations in the availability of suitable groundwater in either sufficient quantity or safe and acceptable quality.

The timing identified for the completion of the various segments represents generally the relative priority assigned by the Commission at this time. The priority and timing of the projects may need to be altered to accommodate the circumstances and requirements that may emerge and the Commission will review the priorities on an ongoing basis. It is the expectation of the Commission, however, that most of the

remaining components of the transmission system network will be completed within the 10 year time frame of the initial Business Plan, that is, by year 2021.

Table 3.3
Shirley McClellan Regional Water System
Construction Timing and Capacity by Line Segment

Line Se	Line Segment		2032 Peak	Day Volur	ne	Constructed/To be Constructed			
From	То	Urban	Rural		Total	Year	Pipe Size	Litres /	
		m3	m3	m3	liters/second	In Service	(mm)	Second	
Main Line									
<b>Transfer Station</b>	Castor	7,391	7,519	14,910	172.6	2008	300	106	
Castor	Coronation	4,657	4,453	9,110	105.4	2008	250	74	
Coronation	Veteran	2,289	3,919	6,208	71.8	2008	250	74	
Veteran	Loyalist	1,662	2,671	4,334	50.2	2008	200	47	
Loyalist	Consort	1,652	2,671	4,323	50.0	2008	150	27	
Coronation	Brownfield	64	534	599	6.9	2017	100		
Consort	Monitor	292	1,336	1,627	18.8	2015	100		
Monitor	Altario	146	891	1,036	12.0	2021	100		
Altario	Compeer	43	445	488	5.6	Unspecified	100		
North Line									
Transfer Station	Donalda	4,894	3,523	8,417	97.4	2013			
Jct North Line	Buf Lake Nrth Shr	2,874	281	3,155	36.5	2017	200	47	
Donalda	Rosalind	1,457	624	2,081	24.1	2018	150	27	
North Shore Line	Meeting Creek	64	90	154	1.8	Unspecified	100	27	
Rosalind	Tillicum Beach	286	362	648	7.5	Unspecified	100	27	
Rosalind	Bawlf	759	452	1,212	14.0	2019	150	27	
Big Valley Branch									
Transfer Station	Big Valley	729	864	1,593	18.4	2012	150	27	
Buffalo Lake Branch									
North Line	South Shore	1,052	3,735	4,787	55.4	2014	250	74	

The capacity of the constructed portions of the Main Line is shown in Table 3.3. Some segments of the Main Line have a capacity to meet the ultimate volume demands of the 25 year peak day. For those segments that have a capacity of less than the 25 year peak day volumes, the Commission may need to consider further enhancements to increase the constructed capacity.

While it is the Commission's intent to construct the remaining segments of the System to at least the 25 year volume capacity, limitations in grant funding may require the initial construction of lesser capacity. Generally, the minimum pipe size to be constructed is 150 mm (6 inch). However for those segments projected to have relatively low volumes, the pipe size to be installed will be reduced to 100 mm (4 inch) to ensure sufficient flow velocity. As well, lesser sizes may need to be considered as well if grant funding is not available in order to initially meet short term immediate needs.

The elevation of lands within the System Service Area generally falls to the east and the pressure of water pumped from the Water Transfer Station will be sufficient to move water through to Member's reservoirs at the ends of the System mains at Compeer. The need for additional mid line or booster pumping capacity on the Big Valley Branch and on the North Line and its branches will be examined as part of detailed engineering design of those sections.

#### 3.5.1 Main Transmission Line – Water Transfer Station to Consort

The major trunk line of the System, the Main Transmission Pipeline from the Water Transfer Station to the Village of Consort was constructed in 2008 and 2009 and became operational in mid-2009. The Main Transmission Line provides service to Commission Members the Village of Halkirk, Town of Castor, Town of Coronation, Village of Veteran and Village of Consort as well as to non-member Village of Gadsby by way of a connection to the Stettler County rural water distribution system. As well the line provides water services to developing rural water distribution systems and truck fill stations in Stettler and Paintearth Counties and in the Special Areas.

Additionally the line provides the opportunity for water service to communities along the alignment of this segment including:

- a. the Village of Botha which is currently served by a direct line from the Town of Stettler, and
- b. the hamlets of Federal, Throne and Fleet which at this time do not have piped distribution systems and in which the properties are served by private wells.

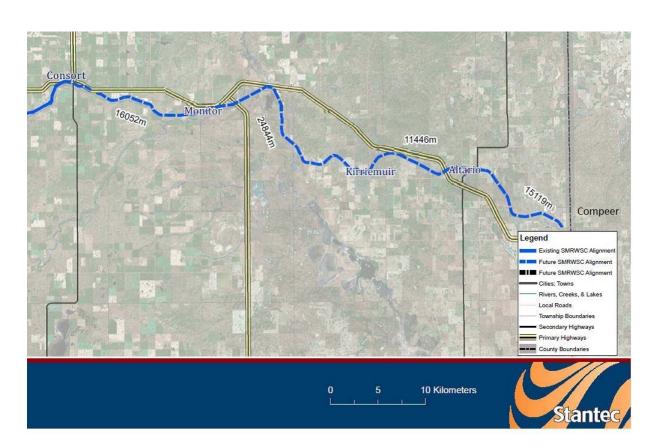
This 157 km PVC pipeline was constructed primarily in the road bed of the abandoned Canadian Pacific Railway with other portions in public road rights of way or rights of way acquired from private owners. The pipe size is initially 300 mm diameter from the Water Transfer Station to Castor, dropping to 250 mm to Veteran, reducing further to 200 mm to Loyalist and finally being completed with 150 mm to Consort.

#### 3.5.2 Main Transmission Line – Consort to Compeer

There remains unconstructed the final segment of the Main Transmission Pipeline east from Consort to Compeer. This pipeline would run a distance of about 56 km and bring regional water supply to the hamlets of Monitor, Kirriemuir, Altario and Compeer. It would also make available for water for the supply of future rural distribution systems in the Special Areas. It is expected that the line will able to be located in the continuation of the abandoned railway right of way.

The decision to construct the entire branch or parts of it would be dependent on a demonstrated need for an alternative water supply at any of the hamlets. The specific timing in either case may be delayed somewhat by the availability of major grant funding. This segment is anticipated to be constructed in stages and these are as follows:

- a) Consort to Monitor Quality issues with current ground water supply in Monitor merit development of the pipeline as soon as funding can be arranged. An application for Water for Life has been submitted and the Commission will continue to recommend funding approval such that construction can be undertaken in 2014.
- b) Monitor to Altario Quality and quantity considerations in the groundwater supply for Altario will continue to be evaluated. Development timing is expected toward the end of the 10 year System completion timeframe.
- c) <u>Altario to Compeer</u> There are currently no quality or quantity issues with current groundwater supply at Compeer. Development timing is unspecified at this time.



#### 3.5.3 Brownfield Branch - Coronation to Brownfield

This future branch would extend north from the main transmission line at Coronation to serve the hamlet of Brownfield, a distance of about 26 km. It would also provide water for the development of rural distributions systems in Paintearth County.

Detailed routing has not been determined. Conceptually the 150 mm line would run on an alignment generally in parallel with Secondary Road 872 either in secondary road right of way with Alberta Transportation agreement or in the public road rights of way one mile east or one mile west.

The decision to construct the entire branch would be dependent on a demonstrated need for an alternative water supply at Brownfield. While groundwater quantity is sufficient at this point, well production has been dropping. The current water supply system is located in the school facility in Brownfield and system facilities are deteriorating. The Plan at this point identifies the construction of the branch in 2017, for operation in 2018. The specific timing in either case may be delayed somewhat by the availability of major grant funding.

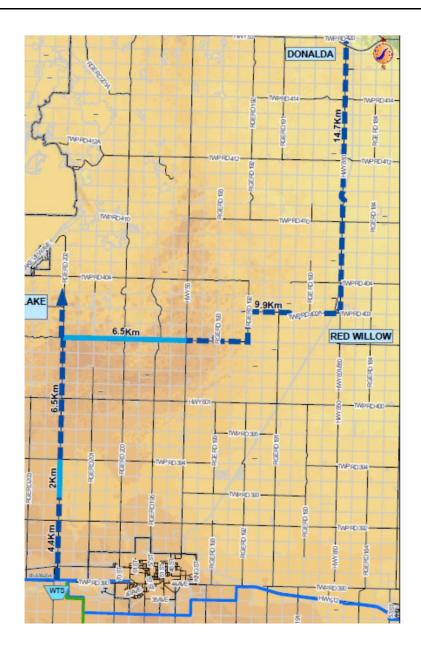


#### 3.5.4 North Transmission Line – Water Transfer Station to Donalda

.

The second major trunk of the System is the North Line from the Water Transfer Station through Village of Donalda and ultimately up to the Village of Bawlf on Highway 13. Construction of the first segment of this line to the Village of Donalda is underway with the line, becoming operational in spring 2014. An application for funding under the Water for Life program has been approved by Alberta Transportation.

In addition to supplying water to the Village of Donalda, the line will provide the opportunity for water services in the hamlet of Red Willow and will be a source for rural water distribution systems planned by Stettler County. The alignment will be primarily public rights of way and public roadways



#### 3.5.5 North Transmission Line – North Shore Branch

The conceptual alignment for the remainder of the North Line beyond Donalda is shown in Figure 3.3 below. The North Shore development area of Buffalo Lake in Camrose County would be served by the North Shore Branch connecting to the System's North Transmission Line near Donalda and aligning west and then south to the hamlet of Pelican Point, a distance of 24 km. It would provide a source of water for the Meeting Creek Branch and also for rural water distributions systems in Camrose County.

There is continuing growth in the Pelican Point and Braeseth Beach Area. A multi-lot development is proposed which would add up to 96 lots with a collective water system. Adequate and acceptable groundwater in the Pelican Point area is not available and any future development must be serviced by a surface water supply or truck hauled water.

Given the near term water supply needs but recognizing some issues arising about grant eligibility for this branch, the pipeline is proposed for construction in 2017 with service available in 2018.

#### 3.5.6 North Transmission Line – Meeting Creek Branch

The alignment for the Meeting Creek Branch is altered from the original concept, connecting now to the North Shore Branch rather than the North Line between Donald and Bawlf. At 12 km, the length is similar and the revised alignment involves less expensive construction. In the hamlet of Meeting Creek there is general contentment with the groundwater supply and there are no issues presently with quality or quantity. There are, however, issues in the rural area with respect to groundwater supply.

The timing of development of the branch will depend on funding availability and remains undetermined at this point.

#### 3.5.7 North Transmission Line – Donalda to Bawlf

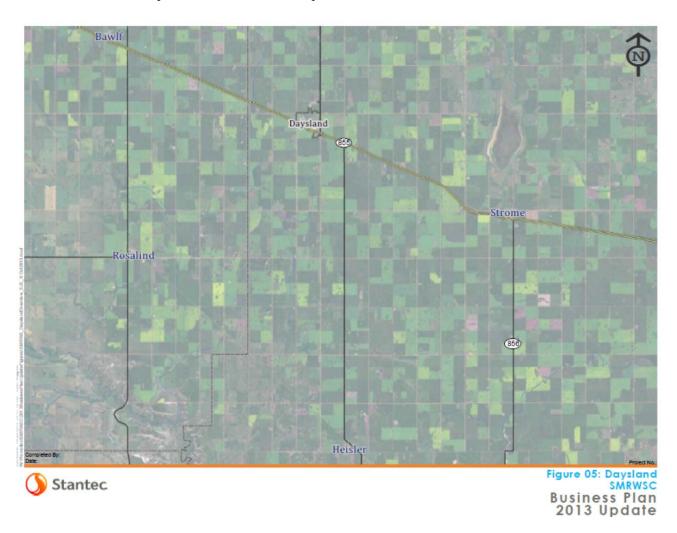
This second 46 km leg of the North Line from Donalda to Bawlf would serve the Village of Rosalind and the Village of Bawlf as well as provide a source of water for rural water distributions systems in Camrose County and for further branches to other hamlets.

There are no immediate issues with groundwater quality or quantity in the area to be served by this segment of the System. Construction is planned in two stages with service available as far as Rosalind beginning in 2018 and service to Bawlf available one year later in 2019.

[13] Tillicum Beach [56] 609 Camrose County Meeting Creek Donalda [53] 850 [56] hite Sands Red Willow Figure 03: North Line Alignment SMRWSC Stantec Business Plan 2013 Update

Figure 3.3 North Line Alignment

The North Line also becomes a possible water source for communities outside of the System Service Area to the east including the Villages of Daysland and Heisler and areas in Flagstaff County. The Commission will keep these municipalities informed of the plans of the Commission.



#### 3.5.8 North Transmission Line – Tillicum Beach Branch

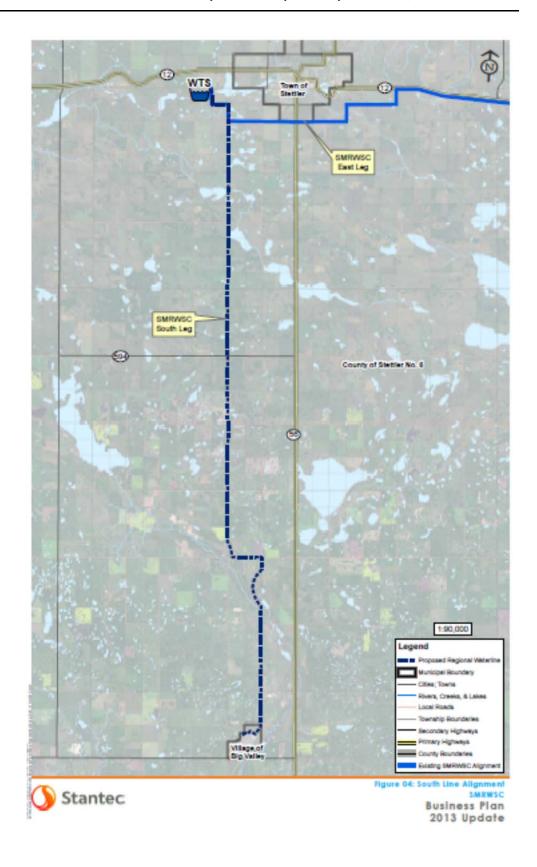
The Donalda – Bawlf segment of the North Transmission Line provides a source of water for a 22 km branch to the west, servicing Kelsey and Tillicum Beach, the latter located on Driedmeat Lake. While Kelsey is a hamlet, there is little development there and, with ground water resources in the area, there is no present need for surface water supply. The water quality at Tillicum Beach is considered poor though within acceptable standards and there is no demand at this time for an alternative, surface water supply. The servicing of Tillicum Beach from the City of Camrose system would be somewhat closer at about 16 km and consequently less expensive. This has been investigated by Camrose County with the city but, with water supply considerations of its own, the City was not receptive.

The decision to construct this branch would be dependent on a demonstrated need for an alternative water supply at Tillicum Beach and the availability of major grant funding. A renewed examination of servicing from the City of Camrose would be undertaken at that time as well. The Plan at this point does not specify and timeframe for development of the branch.

#### 3.5.9 Big Valley Branch – Main Transmission Line to Big Valley

A branch from the Water Transfer Station will run south to Big Valley providing an alternative water source for the Village of Big Valley and a source of water for rural water distribution systems planned by Stettler County. Included in the project would be the installation of pumping capacity at the Transfer Station for the branch and possibly the installation of a booster pump on the branch to provide sufficient pressure for the Big Valley distribution system.

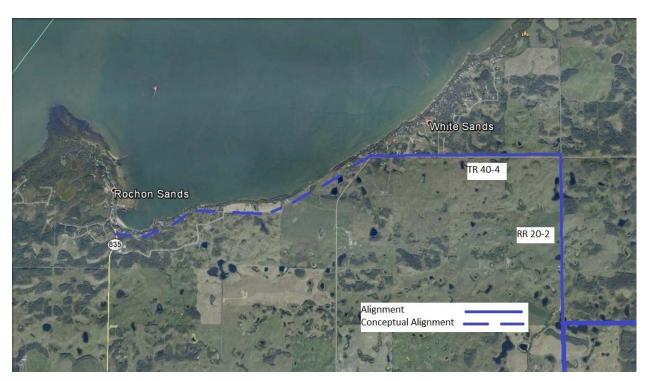
This 37 km line was a top priority of the Commission and application for Water for Life funding had been submitted. Funding for this line was approved May 12, 2011 by the Minister of Transportation and the Commission has moved forward with construction of this line in 2012. Construction is virtually complete with operation expected in October 2013.



#### 3.5.10 Buffalo Lake Branch - North Line to South Shore

This line of the System would serve the Buffalo Lake South Shore area and the present and future development in the Summer Villages of Rochon Sands and White Sands and Stettler County. The branch would be connected to the North Line presently under construction and proceed north on County road rights of way on Range Road (RR) 20-2, then west on Township Road (TR) 40-4. The specifics of the pipeline routing beyond this point, its capacity and pipesize will be identified by the three municipalities in the Buffalo Lake South Shore Water Supply System Development Plan (South Shore Plan) currently under preparation. The South Shore Plan will set out the municipalities' respective objectives for the development of distribution systems to serve White Sands, Rochon Sands and areas of the County, such trunk mains, reservoir and pumphouse facilities that may be needed and the staging and approach for its development.

Construction of the Buffalo Lake Branch is planned for 2015, with operations beginning in 2016.



The Narrows Development Node in Lacombe County (the Narrows) which had initially been envisioned to be served by the Buffalo Lake Branch is instead proposed to be supplied from the Highway 12/21 System which is significantly closer (and correspondingly less expensive) than would be the Buffalo Lake Branch. The Commission will need to make arrangements with the Highway 12/21 Commission for the supply of water to the Narrows.

## 3.6 Distribution Systems

- 1. Within the System Service Area, all of the urban municipalities and many of the hamlets have municipally provided piped water distribution systems. There are some multi-lot developments within the Counties that have communal water distribution systems. All of the rural municipalities have policies in place which encourage the development of piped distributions systems for multi-lot developments. In addition, there are a number of rural water distribution systems in operation, being developed or in the planning stages which will bring piped water to individual farm sites and rural locations.
- 2. The Commission's mandate is to supply treated water to the Members and as such would not undertake the development or operation of any water distribution system. The Members would be responsible to undertake or regulate the development of water distribution systems within the Member's respective boundaries.
- 3. Points will be provided along the main transmission lines and branches to facilitate connection for future water distribution systems that may be developed. These connections will require that the water supplied from the System will be discharged into a reservoir or cistern either individually at each distribution system customer location or into a central reservoir for subsequent pumping and distribution to customer locations.
- 4. The Member will make application to the Commission for connection and would be responsible to meet all of the standards, specifications and requirements of the Commission with respect to connection to the System and metering including the payment of any and all fees, charges and rates imposed by the Commission.
- 5. The configuration and design of the transmission system provides ongoing pressure and flow and, as a result, the direct connection of individual services and clusters of individual services to the transmission lines in order to provide low pressure, constant flow water service may be permitted, provided that:
  - a. There is sufficient pressure at a particular location to enable proper operation of the connection, and
  - b. The volume of water to be provided does not exceed the capacity of the System or jeopardize the ability of the System to meet present operational needs and anticipated future volume requirements of Members

As more low pressure, constant flow systems are connected to the System, the Commission may need to enhance duty pumping capacity at the Water Transfer Station to ensure that sufficient pressure and flow continues to be maintained.

- 6. Where the System Mains or Branches are planned but have not yet been constructed, the Members will require that multi-lot developments be designed so that these piped distribution system can be connected to the future System line.
- 7. The existence or concurrent construction of piped distribution systems is not a pre-condition for the development of the System Mains or any of the System branches. It is envisioned that the System may initially provide water service to a community areas by way of bulk water stations with the development of piped distribution systems coming at a later time.

## 3.7 Treated Water Storage

All distribution systems connected to the System would be required to provide treated water storage equivalent the average volume demand of 2 days. If the distribution system provides for fire flow, the amount of storage would need to be increased to provide a reserve for a major fire.

For development within hamlets and rural municipalities, because of their small scale, dispersed nature or low density, capacity for fire flow in the distribution systems is not generally practical or necessary. However some Members, including the rural municipalities, may wish to develop supplemental storage for fire-fighting purposes

Other than the treated water reservoir at the Water Transfer Station, there are no plans to develop treated water storage capacity as part of the System. Members would be responsible to develop and arrange for the funding of treated water storage.

#### 3.8 Bulk Water Stations

The Commission will not develop and operate bulk water truck fill stations along the System Main. The Members will be responsible to develop such facilities as the Member deems necessary to serve the needs of the Member.

# 4. Project Capital Costs and Funding

# 4.1 Capital Costs

The projected capital costs for the System's development staging and timing are set on Table 4.1 in two parts. These costs are composed of:

- a. the actual costs for the completed Main Transmission Line and Water Transfer Station, details of which are included in Appendix E,
- b. an approved capital cost estimates for the Big Valley Branch and North Line to Donalda, and
- c. preliminary estimates for the other segments of the transmission system using order of magnitude unit costs as set out in Table 4.2

Water transmission line costs include allowances for the purchase of some rights of way from private owners but it is contemplated that the alignment of the water transmission lines would use public road and other public rights of way wherever possible.

The Commission will expend nearly \$59 Million to this point on the Main Transmission Line and for the completion of two projects underway. A further \$33 Million would be incurred in completing the balance of the System as planned.

# 4.2 Capital Financing

The capital financing is set out in Table 4.1 with sources of capital financing including government grant funding, direct contributions by Members, if any, and debt financing by the Commission.

#### 4.2.1 Government Grant Funding

The major share of government funding identified for financing the System's development is through the Government of Alberta Water for Life program. (WFL) Funding under WFL for the completed sections has been provided at 90% funding for the eligible costs for the System's transmission lines and 100% funding for the improvement necessary to the Stettler WTP. WFL funding at 90% has been approved for the Big Valley Branch and North Line to Donalda. In spite of the large volumes for rural use which characterized the System, WFL funding at the same 90% level is expected to help fund the remaining sections of the System. Should WFL funding not be available for a particular stage or

component of the System, the Commission would look to other federal and provincial grant programs for alternative funding.

Table 4.1 Shirley McClellan Regional Water System Summary of Capital Expenditures and Financing By Segment

	Stage 1 Completed	Stage 2 2012-2013	Stage 3 2013	Stage 4 2014	Stage 5 2015	Stage 6 2017
Capital Costs	completed	2012-2013	2013	2014	2015	2017
Water Transfer Station	\$10,904,456					
Main Transmission Line Transfer Station to Consort Consort to Monitor Monitor to Altario Kirriemuir to Compeer	\$32,661,444			\$2,107,300		
Brownfield Branch						\$3,390,725
North Line Transfer Station to Donalda North Shore Branch Donalda to Rosalind Rosalind to Bawlf			\$8,748,947			\$4,800,000
Meeting Creek Branch Tillicum Beach Branch						
Big Valley Branch		\$6,317,068				
Buffalo Lake Branch					\$2,756,000	
	\$43,565,899	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725
Funding Water for Life						
Eligible Costs	\$42,755,507	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725
Funding Rate	90%	90%	90%	90%	90%	90%
Grant	\$38,479,956	\$5,685,361	\$7,874,052	\$1,896,570	\$2,480,400	\$7,371,653
Commission Funding						
Share of Eligible Costs	\$4,275,551	\$631,707	\$874,895	\$210,730	\$275,600	\$819,073
Funding for Ineligible Costs	\$810,392					
<b>Total Commission Funding</b>	\$5,085,943	\$631,707	\$874,895	\$210,730	\$275,600	\$819,073
	\$43,565,899	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725

2018	2019	2021	Undeter mined	Total
				\$10,904,456
				\$32,661,444
				\$2,107,300
		\$4,746,950		\$4,746,950
			\$1,980,225	\$1,980,225
				\$3,390,725
				\$8,748,947
				\$4,800,000
\$6,159,140				\$6,159,140
	\$2,869,230			\$2,869,230
				\$1,570,725
			\$2,879,663	\$2,879,663
				\$6,317,068
			\$0	\$2,756,000
\$6,159,140	\$2,869,230	\$4,746,950	\$6,430,613	\$91,891,872
\$6,159,140	\$2,869,230	\$4,746,950	\$6,430,613	\$91,081,479
90%	90%	90%	90%	a de construir de contrat de construir de co
\$5,543,226	\$2,582,307	\$4,272,255	\$5,787,551	\$81,973,331
\$615,914	\$286,923	\$474,695	\$643,061	\$9,108,148
				\$810,392
\$615,914	\$286,923	\$474,695	\$643,061	\$9,918,540
\$6,159,140	\$2,869,230	\$4,746,950	\$6,430,613	\$91,891,872
	\$6,159,140 \$6,159,140 \$6,159,140 90% \$5,543,226 \$615,914 \$615,914	\$6,159,140 \$2,869,230 \$6,159,140 \$2,869,230 90% 90% \$5,543,226 \$2,582,307 \$615,914 \$286,923 \$615,914 \$286,923	\$4,746,950 \$6,159,140 \$2,869,230 \$6,159,140 \$2,869,230 \$4,746,950 90% 90% 90% 90% 90% \$5,543,226 \$2,582,307 \$4,272,255 \$615,914 \$286,923 \$474,695 \$615,914 \$286,923 \$474,695	\$4,746,950 \$1,980,225 \$1,980,225 \$1,570,725 \$2,879,663 \$0 \$6,159,140 \$2,869,230 \$4,746,950 \$6,430,613 90% 90% 90% 90% \$5,543,226 \$2,582,307 \$4,272,255 \$5,787,551 \$615,914 \$286,923 \$474,695 \$643,061 \$615,914 \$286,923 \$474,695 \$643,061

Table 4.2
Shirley McClellan Regional Water System
Estimation of Capital Costs for Remaining Line Segments

Ding Line Segment	Pipe Line	Pipe	Unit Cost	Total				
Pipe Line Segment	Length (km)	Diameter	per meter	Cost				
Main Transmission Line								
Transfer Station to Consort	147.0	Various	\$222	\$32,661,444				
Consort to Monitor	16.1	100 mm	\$131	\$2,107,300				
Monitor to Altario	36.4	100 mm	\$131	\$4,746,950				
Altario to Compeer	15.2	100 mm	\$131	\$1,980,225				
North Line								
Transfer Station to Donalda	45.4		\$193	\$8,748,947				
Donald to Rosalind	31.5	150 mm	\$196	\$6,159,140				
Rosalind to Bawlf	14.7	150 mm	\$196	\$2,869,230				
Branches								
Big Valley	37.0	150 mm	\$171	\$6,317,068				
Buffalo Lake - Initial Stage	10.6	250 mm	\$260	\$2,756,000				
Buffalo Lake - Completion	0.0	250 mm	\$260	\$0				
Brownfield	26.0	100 mm	\$130	\$3,390,725				
North Shore Branch	24.0	200 mm	\$200	\$4,800,000				
Meeting Creek	12.0	100 mm	\$131	\$1,570,725				
Tillicum Beach	22.0	100 mm	\$131	\$2,879,663				
Total System Length	437.75		•	\$80,987,416				
	Actual Unit Cost							
	Detailed Estimate Unit Cost							
	Order of	Magintude Est	timate					

## **4.2.2** Direct Contributions by Members

A Member may, at the Member's discretion, choose to pay its share of the net capital costs of the System construction to the Commission at the completion of each stage rather than having the Commission borrow the Member's share by way of debenture borrowing and collect repayment of the Member's share over time.

The calculations in this Plan do not include any direct contributions by Members toward its respective net capital costs of the System. Should such direct contributions be in fact by made by a Member or Members, the amounts payable by the Member either directly to the Commission when the Section 2.5 (3) is in effect or the rates when Section 2.5 (2) is in effect will be adjusted accordingly to recognize the prepayment of the Member's net capital share.

If a Member requires the capacity of portions of the System to be increased beyond what which would be necessary to accommodate the Member's allocated volume in Table 2.1 or specifically by line segment as shown in Table 3.3 and such increases result in costs that are not eligible for grant funding, then the Member would be responsible to pay directly to the Commission at the time of construction, the difference in actual cost between providing for the attributed capacity and the actual capacity required.

#### 4.2.3 Debenture

The Commission will fund the net project costs (after the deduction of WFL, other grant funding or direct contributions from Members or Customers) with debenture borrowing from the Alberta Capital Financing Authority or long term borrowing from other sources if financially more favorable. The amortization term of the borrowing will be 25 years.

Under Bylaw 9-12, the Commission has taken out a debenture for Stage 1 for just over \$4 Million at an interest rate of 3.0757%. For the purposes of the Plan, the interest costs on future debentures for Stage 2-5 over the years 2014 and 2015 are calculated at 4%. Borrowing for Stage 6 and later projects anticipates an interest rate of 5%. The rate paid would be that in effect at the time of borrowing. The 25 year debenture rate from Alberta Capital Finance Authority at mid August 2013 was 3.81%.

The details of the capital borrowing are set out in Table 4.3.

As set out in Section 2.5 (3) the debenture payments will be collected initially by direct contribution of Members to the Commission. The amount of these contributions by Members is set out in Table 6.6 following. In the long term, the debenture payments will be included in the uniform rates as contemplated in Section 2.5 (2).

Table 4.3
Shirley McClellan Regional Water System
Debenture Borrowing Details

#### **Debenture Borrowing**

25 year Amortization, Semi-Annual Payments

	Principal	Interest	Total to Repay	Rate	Factor	Annual Payments
Completed Transmission Line			'			
Borrowing 1 (Bylaw 9-12)- Latter 2012	\$4,008,486	\$1,765,977	\$5,774,463	3.0757%	0.05762238	\$230,979
Stages 2, 3 - Construction 2012-2013						
Borrowing 2 - 2nd Half 2014	\$1,506,602	\$890,643	\$2,397,245	4.0%	0.06364642	\$95,890
Stages 4, 5 - Construction 2014-2015						
Borrowing 3 - Latter Half 2015	\$486,330	\$287,499	\$773,829	4.0%	0.06364642	\$30,953
Stage 6 - Construction 2017						
Borrowing 4 - Latter Half 2018	\$819,073	\$624,873	\$1,443,945	5.0%	0.07051612	\$57,758
Future Stages - Construction 2018 +	\$2,020,593	\$1,541,517	\$3,562,110	5.0%	0.07051612	\$142,484
-	\$8,841,083	\$5,110,509	\$13,951,592		-	\$558,064
	\$8,841,083					
Payments - Summary						
	2013	2014	2015	2016	2017	2018
Payments - Principal and Interest						
Borrowing 1 (Bylaw 9-12)- Latter 2012	\$230,979	\$230,979	\$230,979	\$230,979	\$230,979	\$230,979
Borrowing 2 - 2nd Half 2014			\$95,890	\$95,890	\$95,890	\$95,890
Borrowing 3 - Latter Half 2015				\$30,953	\$30,953	\$30,953
Borrowing 4 - Latter Half 2018						
Future Borrowings	6220.070	£222.070	\$225.050	¢257.024	<b>6257.024</b>	6257.024
Total Payments	\$230,979	\$230,979	\$326,868	\$357,821	\$357,821	\$357,821
Recovered from:						
Members Directly	\$230,979	\$230,979	\$326,868	\$357,821	\$357,821	\$357,821
Rate Base	\$0	\$0	\$0	\$0	\$0	\$0
Total Payments	\$230,979	\$230,979	\$326,868	\$357,821	\$357,821	\$357,821

#### 4.2.4 Debt Limit

Under the *Regional Services Commission Debt Limit Regulation* AR 76/2000, there are two limitations to the amount of debt, both operating and capital, that a commission can carry to develop the public utility:

a. Total debt cannot exceed two times the previous year's annual revenue, and

b. Total debt servicing cost (principal and interest payments) cannot exceed 35% of the annual revenue.

On its own revenue, the Commission is unable to secure the required borrowing to meet the Commission's capital funding share of the System to be developed. The Minister of Municipal Affairs has granted the Commission an extension of its debt limit to \$4,700,000 for the first stage and debt limits of \$3 Million each for Stages 2 and 3. Debt Limit Extension approval to a total of 6.4 Million for Stages 4 and 5 and \$6.7 Million for Stage 6 will be required The debt limit calculations and the borrowing limit extensions are set out in Table 4.4. The debt limit extension value allows a 5% overage on the projected debenture borrowing as a contingency. Over the 5 year period, yearly debt service costs reach an upper limit of 23% of annual revenue, below the statutory limit of 35%.

Table 4.4
Shirley McClellan Regional Water System
Detailed Debt Limit Calculation

Stage 1	Stages 2 and 3	Stage 4 and 5	Stage 6
Completed	2012-2013	2014	2017
\$1,560,442	\$1,316,289	\$1,356,544	\$1,714,690
\$4,700,000	\$3,000,000		
\$4,700,000			
, , , , , , ,	, , , , , , , , , , , , , , , , , , , ,		
\$500,000	\$500,000	\$500,000	\$500,000
\$0		\$5,084,351	\$5,050,251
\$4,008,486	. , , ,		
(*) S. C.	\$1,506,602		
	, , ,	\$486,330	
			\$819,073
\$4,508,486	\$5,794,689	\$6,070,681	\$6,369,324
\$191,514	\$205,311	(\$4,714,136)	(\$4,654,634)
	J	\$6,400,000	\$6,700,000
2012	2013	2014	2016
\$146,240	\$460,701	\$474,791	\$586,420
\$230,979	\$230,979	\$230,979	\$326,868
23%	18%	17%	20%
	\$1,560,442 \$4,700,000 \$4,700,000 \$500,000 \$0 \$4,008,486 \$191,514 2012 \$146,240 \$230,979	Completed 2012-2013 \$1,560,442 \$1,316,289  \$4,700,000 \$3,000,000 \$3,000,000 \$4,700,000 \$6,000,000 \$0 \$3,788,088 \$4,008,486 \$1,506,602  \$4,508,486 \$5,794,689 \$191,514 \$205,311  2012 2013 \$146,240 \$460,701 \$230,979 \$230,979	Completed         2012-2013         2014           \$1,560,442         \$1,316,289         \$1,356,544           \$4,700,000         \$3,000,000           \$4,700,000         \$6,000,000           \$500,000         \$500,000           \$0         \$3,788,088           \$1,506,602         \$486,330           \$4,508,486         \$5,794,689         \$6,070,681           \$191,514         \$205,311         (\$4,714,136)           \$6,400,000         \$6,400,000           \$146,240         \$460,701         \$474,791           \$230,979         \$230,979         \$230,979

## 4.3 Capital Development Alternatives

The Plan to this point has set out a staged development of the remainder of the System based on the expectation of Water for Life funding will be at 90% of capital costs and would available at the timings identified in the Plan. However, it is acknowledged that the funding constraints and budgetary considerations of the Province will have an effect on the availability of the Water for Life funding. In cases where funding availability for a particular stage is at question or is expected to be delayed, the Commission will consider options to facilitate development of a particular line where surface water supply is needed. Among these options, the Commission may consider:

- a. Constructing a line of lesser capacity as provided in Section 3.5
- b. Advancing the construction time frame
- c. Entering into cost sharing and construction arrangements with Members.
- d. Considering alternative sources of supply

The following lines may merit such consideration:

#### 4.3.1 Buffalo Lake Branch

The Buffalo Lake Branch is currently proposed for construction in 2015 with service available in 2016. Growth and development continues in the South Shore. There are already two developments with piped distribution systems, one of which requires truck hauled water. The Summer Village of Rochon Sands is interested in developing a distribution system and numbers of White Sands units are truck hauling bulk water from the Town of Stettler.

Major grant funding may not be available on the timing identified in the Plan and emerging water needs suggest a 2014 timing would be opportune. The Commission may, as an alternative, give consideration to moving forward with an arrangement with the County of Stettler to construct the initial section of the Branch with a lesser sized pipe (75 mm), already in inventory of the County, in 2014 without government funding. The line would be constructed to Buffalo View Estates on Bayview Street and would include installing a truck fill facility in White Sands. The estimated cost is about \$500,000 for the pipeline and \$150,000 for the truck fill. These costs would be funded by the Commission.

This lesser sized line would provide volume to serve up to about 950 m<sup>3</sup> per day or 700 homes. There is currently about 300 lots developed or developable in the subdivisions currently with piped water systems while there is about 200 developed units in Rochon Sands. The smaller pipe size would provide service for these existing units as well as 200 additional units.

This alternative will be addressed by the three South Shore municipalities as part of the development of the South Shore Plan (Section 3.5.10) and a proposal will be presented to the Commission by the three municipalities.

#### 4.3.2 North Shore Branch

Growth in continuing on the North Shore of Buffalo Lake as well and the area lacks groundwater resources for supply. The Plan identifies the development of the line in 2017 in recognition of some potential delay in securing Water for Life Funding.

If the prospects for getting grant funding suggest additional delay, then the Commission may, as an alternative, give consideration to moving forward with an arrangement with the Camrose County to construct the Branch with a lesser sized pipe (75 mm) possibly from the Highway 12/21 System instead since it is closer (15.8 km vs. 24 km). The 700 units that could be served with the lesser line would be about ½ of the maximum number identified in the Buffalo Lake IDP for Camrose County. The estimated cost of the lesser line to Highway 12/21 System at Bashaw is about \$1.6 Million.

# 5. System Operation

The operation of the System will evolve as the various phases are completed. The Commission Board will continue to examine the best alternatives for management, administration and system operations.

## 5.1 Management and Administration

Generally speaking, as the development of the System proceeds and the scale of the System expands, the Commission will consider options for a management and administrative approach, including:

- a. establishing a separate management and administrative structure of the Commission with employees of the Commission and a separate administrative center,
- b. contracting management and administration to one of the Members
- c. contracting management and administration to another Commission, or
- d. contracting management and administration to an external agency or firm

and make decisions with respect to an approach at such times as may be appropriate to ensure proper management and administration of the Commission and the System.

Administrative services are provided by Stettler County under a services agreement. The Commission has appointed Tim Fox, the Chief Administrative Officer of the Stettler County as the Commission Manager.

Combining the Shirley McClellan Commission with the Highway 12 /21 Regional Water Services Commission ultimately may have merit, especially with two Members with membership in both commissions and with portions of the System Service Area potentially serviceable from the Highway 12/21 System. The Board will explore this possibility with the Highway 12 / 21 Commission at some point in the future.

# 5.2 Operations

The Commission will be responsible to put in place arrangements for the operation of the System. Major aspects of such operational responsibility shall include, but not be limited to:

- a. Operation, maintenance and repair of transmission pipelines, metering facilities, control systems and related facilities and lands,
- b. Such monitoring and testing of the:
- c. Quality of treated water that may be necessary to ensure compliance with Provincial health requirements, and

- d. Quantity of treated water delivered to the Members and Customers that may be necessary to ensure compliance with connection agreements.
- e. Coordination of System operations with the water distribution systems of the Members,
- f. Inspection of rights of way associated with the System and supervision of any activities on these lands that are relevant to or have the potential to affect the System, and
- g. Management of any operations center that may be required.

As the scale of the System expands, the Commission will consider options for operations, including:

- a. direct Commission operation with Commission employees and a separate operations center,
- b. contracting operations to one of the Members,
- c. contracting operations to the another Commission
- d. contracting operations to an external agency or firm

and make decisions with respect to an approach at such times as may be appropriate to ensure proper operations of the System.

At the present time the operation of the System is contracted to Stettler County under a 3 year services agreement expiring January 22, 2015.

# 5.3 Financial Management

The Commission will set in place policies and procedures which ensure the proper management of the financial affairs of the Commission and System. The Manager will ensure that detailed records and books of account are kept and maintained in accordance with generally accepted accounting principles and meet the requirements of the provisions of Bylaw No. 6-11, the Municipal Government Act (supra) and any other relevant legislation.

The Commission has established in Part 11 of Bylaw No. 6-11, the principle of full annual cost recovery in setting rates and charges for services provided by the System and will make its financial decisions based on accomplishing this objective over a three year time frame. This is reflective of Section 602.21(1) of the Municipal Government Act (supra) which provides that "If the total revenues and transfers of a commission over a 3-year period are less than the total expenditures and transfers of the commission for the same period, the operating budget for the commission for the year following the 3-year period must include an expenditure to cover the deficiency."

#### 5.3.1 Financial Plans and Budgets

The Commission's financial year is the calendar year. In accordance with requirements of Bylaw No. 6-11, a Financial Plan for the next three years will be

prepared in the fall of each year. Included in this plan will be the operating and capital budgets for the next ensuring year. Initially, the timing of the preparation and adoption of this Financial Plan and budgets may be varied as necessary during the capital construction and initial startup phases of the System.

As provided under Section 602.2(1) of the *Municipal Government Act* and in Bylaw No. 6-11, the Financial Plan and budgets will set out the:

- a. Estimated expenditures for:
  - i. Operation of the Commission Board and administration,
  - ii. Operation of the System,
  - iii. Purchase of Water
  - iv. Capital development of the System,
  - v. Repayment of debt obligations,
  - vi. A return on equity or, if necessary, amounts for depreciation or depletion,
  - vii. Any other non-cash expenditures, and
  - viii. Any amount needed to recover any deficiency.
- b. Estimated amount and sources of revenue required to meet or exceed the estimated expenditures,
- c. Rates and fees to be charged to Members and customers of the System,
- d. Expected magnitude and timing of the contributions required of the Members, and
- e. Rates of remuneration and expenses to be provided to the Directors of the Board.

#### **5.3.2** Financial Reports

The Manager will prepare for the Commission Board quarterly financial reports for operations which will set out details of budgeted revenue estimates and expenditure appropriations, actual revenues and expenditures to date and in the case of the third quarter report, estimated final revenues and expenditures.

The Manager will prepare for the Commission Board ongoing financial reports for capital project activities which will set out details of authorized capital expenditure appropriations and expected capital financing, actual expenditures and financing to date and the estimated final expenditures and financing.

Bylaw No. 6-11, provides for the appointment of an auditor and the presentation of an audited financial statement at the Commission's Annual meeting to be held no later than April 30<sup>th</sup> of each year. The audited financial statements will be distributed to each Member within thirty (30) days of the Board's approval.

#### 5.3.3 Cash Management and Authorization of Expenditures

The Manager will establish and maintain such accounts with a financial institution or institutions authorized by the Board that may be necessary to handle the financial transactions of the Commission related to capital construction and operation.

The Board will authorize such:

- a. Interim and long term borrowing as may be required to meet the capital construction expenditures of the System, and
- b. Interim borrowing as may be required to meet the operating expenditures of the System.

The Manager will manage the flow of cash to ensure that sufficient funds are in place in a timely fashion to meet the financial obligations of the Commission and that surplus cash is invested appropriately.

The Commission will require two signatures to make, sign, draw, accept, negotiate, endorse, execute and deliver any cheques, promissory notes, drafts, acceptances, bills of exchange, orders for the payment of money or other instruments, whether negotiable or not, on behalf of the Commission. One signature must be that of the Chair, or in the Chair's absence, the Vice-Chair and the second signature shall be the Manager or, in Manager's absence, any other person authorized by the Manager.

#### 5.3.4 Interim Borrowing or Line of Credit

The Commission has currently arranged with the Commission's financial agency, an ongoing line of credit in the amount of up to \$10,000,000 to ensure adequate cash flow for operating and capital purposes. Because of the debt limitations identified in Section 4.2.5, the continuing line of credit would be reduced to \$500,000 for operating purposes only. During the construction time frame 2013 to 2017, the Commission will seek to arrange with the Commission's financial agency, an ongoing capital line of credit to the limit of the Commission' debt limit to ensure adequate cash flow for capital construction purposes.

# 5.4 Insurance and Risk Management

The Commission will put in place sufficient types and levels of insurance coverage to ensure that the Commission corporately, as well as its Directors, Officers and staff are adequately protected, including, but not limited to:

- a. General Umbrella Liability Insurance,
- b. Liability Insurance for Directors, Officers and staff,
- c. Environmental Impairment Insurance,
- d. Property and Fire Insurance,
- e. Stationary Machinery, Equipment and Boiler Insurance,

- f. Vehicle and mobile Machinery and Equipment Insurance, and
- g. Business Continuation Insurance.

The insurance coverage shall be sufficient in terms and quantity to hold harmless and otherwise indemnify the Members for any liability that might be incurred in relation to any activities on Commission property or actions by the Commission for which the Commission or other third party is solely responsible.

The Commission has already put in place the Liability Insurance for Directors and Officers of the Commission through Jubilee Insurance, a service provided through the Alberta Association of Municipal Districts and Counties of which the Commission is an associate member. The Commission will add insurance coverage progressively as the System components are constructed and activated.

The Commission will require of any contractor, agent or third party undertaking activities on Commission facilities or acting on behalf of the Commission to have sufficient liability and builders' insurance coverage to protect the interests of the Commission. The Commission will also require that such contractors, agents or third parties have in place, where it is appropriate to do so, such financial security and guarantees to ensure that any works or activities undertaken may be completed at no additional cost to the Commission.

## 5.5 Alberta Environment Operating Approvals

Alberta Environment has issued to the Commission, Registration No. 249384-00-00 for the activity of "construction, operation or reclamation of a waterworks system." This registration was effective August 26, 2008 and does not expire.

Under the provisions of the *Environmental Protection and Enhancement Act*, R.S.A 2000, c.E-12, the Commission is required to operate the System in accordance with the Code of Practice for a Waterworks System Consisting Solely of a Water Distribution System. The Code of Practice sets out the requirements for:

- a. quality parameters
- b. analysis and monitoring,
- c. system operations,
- d. operator qualification,
- e. record keeping and reporting

Under the Code of Practice an Emergency Response Plan is required which would set out steps to be taken in a variety of events arising from system failures and natural disasters.

The present registration identifies only the presently constructed components of the System and the supply of water to currently served communities. Amendment to the registration will be required from time to time to add new components and served communities to the System.

## **5.6 Policy Development**

The Board will undertake, on an ongoing basis, the development and adoption of policies that may be necessary or appropriate to guide and govern the:

- a. Decision making of the Board, and
- b. The actions of the Manager in the administration, operation and capital development of the System.

In addition to those policy areas already addressed in this Plan, the Board will consider in the ensuing year the development of a policy for the Conservation and Stewardship of Water and an updating and expansion of the existing Emergency Response Plan. The Commission will seek funding under the Alberta Municipal Affairs Regional Collaboration Program to assist in the development of these policies.

# 6. Operating Costs and Revenue

The operating costs and revenue projections and analysis in this section are set out for the five year period 2013 to 2017, with 2013 reflecting the adopted budget for the Commission with major anticipated variances and the remaining years being projections from 2013. A general cost escalation factor of 2% in each year is included in the calculations.

## **6.1 Governance and Administrative Operations**

The projected expenditures for the annual operation of the Board and Commission Administration for 2011 to 2016 are set in Table 6.1. Remuneration due to Directors for attending meetings and time and out of pocket expenses incurred in the service of the Commission will be funded by the Commission. The general administrative services expenditures contemplate the engagement of a contractor provide the management and administrative support to the Commission. The cost of governance and administration is split equally among the 16 Members.

## **6.2 System Operations**

The projected expenditures for the annual operation of the System for the period 2013 to 2017 that are to be recovered from water rates are set out in Table 6.2.

## **6.2.1** Projected Operating Expenditures and Required Revenues

These operating expenditures are based on the following assumptions and estimations:

- a. Water is purchased from the Town of Stettler at a rate of \$1.35/m3 with an annual escalation.
- b. The operational budget is based generally on projections of past expenditures increased by general inflation. Additional sections of the transmission line are to become operational in most years and to reflect these expansions, the operations and maintenance costs have been increased overall by a factor of 1.05 1.1 (5 10% increase).
- c. Annual diversion to an operating reserve of \$25,000 diverted annually beginning in 2014.
- d. A minimal operating cash surplus is planned.

Table 6.1
Shirley McClellan Regional Water System
Governance and Administrative Operations
Projected Expenditures and Member Allocations
2013-2017

		2013	*	2014		2015		2016		2017
					_	A CONTRACTOR OF THE PARTY OF TH	_			The second secon
E	l	Budget		ojected	P	rojected	P	rojected	P	rojected
Cost Escalation Factor				2.0%		2.0%		2.0%		2.0%
Governance and Administrative Expense						- 1 CONTRACTOR (1987)		West control to the		The second
Board Remuneration		\$6,000		\$6,120		\$6,242		\$6,367		\$6,495
Mileage and Subsistance		\$3,000		\$3,060		\$3,121		\$3,184		\$3,247
Membership Fees		\$100		\$102		\$104		\$106		\$108
Frieght and Postage		\$750		\$765		\$780		\$796		\$812
Telehone		\$0		\$0		\$0		\$0		\$0
Advertising		\$0		\$0		\$0		\$0		\$0
Accounting / Managerment Services		\$65,000		\$66,300		\$67,626		\$68,979		\$70,358
Legal Fees		\$5,000		\$5,000		\$5,000		\$5,000		\$5,000
Insurance		\$2,000		\$2,040		\$2,081		\$2,122		\$2,165
Regional Collaboration		\$85,500								
Goods and Supplies		\$2,000		\$2,040		\$2,081		\$2,122		\$2,165
Bank Charges		\$500		\$510		\$520		\$531		\$541
Total Expense	\$	169,850	\$	85,937	\$	87,556	\$	89,207	\$	90,891
Less: Provincial Grants		(\$85,500)								
<b>Net Cost of Administration</b>	\$	84,350	\$	85,937	\$	87,556	\$	89,207	\$	90,891
Recovered From Members										
1/16th Share		\$5,272		\$5,371		\$5,472		\$5,575		\$5,681
Total Recovered		\$84,350		\$85,937		\$87,556		\$89,207		\$90,891

Table 6.2
Shirley McClellan Regional Water System
System Expenditures Recovered from Rates
2013-2017

	2013	2014 2015		2016	2017
Cost Increase Factor (Volume/Inflation)	Projected 0.0%	Projected 2.0%	Projected 2.0%	Projected 2.0%	Projected 2.0%
cost increase ractor (volume/illiation)	0.070	2.070	2.070	2.070	2.070
Governance and Administration (Table 6.1)	\$0	\$0	\$0	\$0	\$0
Purchase of Water					
From Stettler WTP					
Volume	389,268	444,312	495,148	527,810	544,148
Projected Rate / m3	\$1.35	\$1.38	\$1.40	\$1.43	\$1.46
Cost for Water	\$525,512	\$611,818	\$695,456	\$756,157	\$795,155
Prior Years "Trueup"	\$65,000				
Total Purchase of Water	\$590,512	\$611,818	\$695,456	\$756,157	\$795,155
Transmission Lines O and M					
Factor for Increase in Size of System		1.1	1.05	1.05	1.05
Operations Contract	\$140,000	\$157,080	\$168,233	\$180,177	\$192,970
SCADA / Communications / Data Lines	\$30,000	\$33,660	\$36,050	\$38,609	\$41,351
Contacted Services and Rentals	\$1,000	\$1,122	\$1,202	\$1,287	\$1,378
Maintenance and Repair	\$0	\$0	\$0	\$0	\$0
Insurance	\$2,000	\$2,244	\$2,403	\$2,574	\$2,757
Goods and Supplies	\$12,000	\$13,464	\$14,420	\$15,444	\$16,540
Testing	\$12,500	\$14,025	\$15,021	\$16,087	\$17,229
Utilities	\$15,000	\$16,830	\$18,025	\$19,305	\$20,675
	\$212,500	\$238,425	\$255,353	\$273,483	\$292,901
Transfer Station O and M					
Insurance	\$2,000	\$2,244	\$2,403	\$2,574	\$2,757
Utilities	\$78,200	\$87,740	\$93,970	\$100,642	\$107,787
Chemicals	\$500	\$561	\$601	\$643	\$689
	\$80,700	\$90,545	\$96,974	\$103,859	\$111,233
Transfer to Operating Reserves					
Operating Reserve	\$0	\$25,000	\$25,000	\$25,000	\$25,000
	\$0	\$25,000	\$25,000	\$25,000	\$25,000
Capital Development and Transactions					- V
Debt Repayment (Table 4.3)	\$0	\$0	\$0	\$0	\$0
To Capital Reserves / Projects	\$0	\$50,000	\$50,000	\$50,000	\$25,000
	\$0	\$50,000	\$50,000	\$50,000	\$25,000
Total Expenditures to be Recovered	\$883,712	\$1,015,788	\$1,122,783	\$1,208,499	\$1,249,288

#### 6.2.2 Capital Development and Major Capital Asset Replacement

Because of the limited customer base in the initial years and with newly constructed infrastructure, only a small amount funds will be set aside from operating revenue for capital purposes, either as:

- a) an appropriation for capital enhancements or improvements to the constructed system components, or
- b) diversion to reserve

The amount diverted to capital reserves is insufficient to fund the long term replacement of capital assets. The Commission's year-end financial statement, the format of which is required by Alberta Municipal Affairs, identifies the depreciation or amortization of tangible capital asset values. However, the Commission, like most regional systems in Alberta, has not included depreciation as an expense in determining rates.

Tangible Capital Assets values and amortization are set out in Table 6.5 and shown in detail in Appendix H. For 2013, the depreciation expense on the current tangible fixed assets is about \$750,000. This will increase to nearly \$ 1 Million with the completion of Stages 2-6.

As the System components are for the most part new or nearly new and replacement of major components is not anticipated until far into the future, to begin putting funds in reserve for long term replacement would require significantly higher rates to Members and would result in a situation where an agent of the Municipalities would be holding significant cash reserves while the Municipalities themselves face financial challenges. For these reasons, the Commission will not, at this point, begin to accumulate funds for the eventual replacement of major tangible capital assets. Such a diversion may be possible to consider once the existing debt is retired.

## 6.3 Rates and Charges

#### 6.3.1 Principles Governing the Establishment of Long Term Rates

Part 11 of Bylaw No. 6-11 provides that the Commission will establish such rates and charges for the System on a full cost recovery basis. The adoption of these rates and fees are required by a bylaw of the Commission Board.

In the long term, the Commission will use a "postage stamp" approach in determining the rate for water services to be provided with all Members being charged a uniform rate per cubic meter for operation, maintenance, transmission, and treatment. This approach achieves:

- a. Equity Uniform rates provide the same operation, maintenance, transmission, and treatment rates per volume for each municipality regardless of their distance from the water treatment plant,
- b. Simplicity Easy to understand and to apply for the Committee, the simplicity of a postage stamp rate is one of its chief advantages,
- c. Revenue Stability The stability of revenues provide a stable financial base for the Committee which allows for a constant approach to long term planning, and
- d. Conservation A postage stamp rate structure will provide incentives for communities to reduce the amount of water produced and to conserve valuable water resources.

However, as provided in Section 2.5 (3) of the Plan and Section 11.14 of Bylaw No. 6-11, initially the calculated rates will only include System operating costs and operating and capital reserve transfers.

#### 6.3.2 Calculation of Rates 2013 - 2017

The calculation of the uniform rate is set in Table 6.3 following and is based on volumes of water estimated to be required by the Member as detailed in Appendix G. External revenue from the Town of Stettler for the services provided by the Water Transfer Station reduces the expenditures that need to be recovered from rates.

The Commission has established a rate of \$2.24 / m3 for the budget year 2013. This rate would be held until 2017. There has been a significant increase in the rate projections from those projected in the 2011 Business Plan, about 20% or about \$.40 per m3. This is primarily due to reductions in projected volumes to 70% or less of previously projected levels. As an example, this Plan projects the sales volume in 2015 at 500,000 m3. In the 2011 Plan, the volume projection for 2015 was 725,000 m3.

As well there has been an increase of \$0.11/m3 in the projected cost of purchasing treated water from the Town of Stettler. This increase is in part due to reduced volumes.

Table 6.3
Shirley McClellan Regional Water System
Rate Calculation for Water Services
Years 2013 - 2017

	2013	2014	2015	2016	2017
	Budget	Projected	Projected	Projected	Projected
Rate Calculation					
Projected Annual Volume in m3 per year for Co	nnected Memb	ers (from Appe	endix G)		
Town of Castor	118,000	121,456	122,671	123,897	125,136
Town of Coronation	113,000	117,156	118,327	119,511	120,706
Village of Bawlf				· (e	i e
Village of Big Valley	18,250	36,903	37,087	37,273	37,459
Village of Consort	94,418	96,305	97,268	98,241	99,223
Village of Donalda	-	23,506	31,655	31,971	32,291
Village of Halkirk	9,600	10,137	13,301	13,700	14,111
Village of Rosalind				-	16
Village of Veteran	25,000	25,384	25,511	25,638	25,767
SV of Rochon Sands		-	:=	1,311	4,052
SV of White Sands		::=		493	507
	378,268	430,846	445,820	452,035	459,252
Camrose County				2,406	3,681
Lacombe County	-	: <del>-</del>	-	( <b>=</b>	-
Paintearth County	3,800	3,800	3,800	4,390	4,396
Stettler County	2,500	4,666	32,588	55,959	63,718
Special Areas	4,700	5,000	12,941	13,021	13,101
	389,268	444,312	495,148	527,810	544,148
Volume of Bulk Water Stations	-	-		£.	
Total Volume	389,268	444,312	495,148	527,810	544,148
Total to be Recovered From Rates (Table 6.2)	\$883,712	\$1,015,788	\$1,122,783	\$1,208,499	\$1,249,288
Less: Other Revenue					
Town of Stettler - Transfer Station	\$43,500	\$44,370	\$45,257	\$46,163	\$47,086
Net Expenditures and Surplus to be Raised	\$840,212	\$971,418	\$1,077,526	\$1,162,337	\$1,202,203
Rate Per M3 Required to meet Net Expenditures	\$2.16	\$2.19	\$2.18	\$2.20	\$2.21
Established / Projected Rate Per M3	\$ 2.24	\$ 2.24	\$ 2.24	\$ 2.24	\$ 2.24
Revenue Generated	¢ 971.060	¢ 005.250	ć 1 100 133	¢ 1 102 204	¢ 1 210 002
nevenue Generated	\$ 871,960	\$ 995,259	\$ 1,109,132	\$ 1,182,294	\$ 1,218,892

## 6.3.3 Financial Picture – Completion of the System

The rate calculation for 2017 does yet not include the construction of the entire System, a situation expected to be achieved in a number of years. While the accurate estimation of rates years into the future is inherently difficult and is to be approached with caution. A possible financial picture for the System is set out in Table 6.3.1 for year 2021 when most of the System would be in place. The table identifies the possible rate per m3 calculated under:

- a. the interim approach set out in Section 2.5 (3) and used to calculate rates in Section 6.3.2
- b. the long term approach set out in Section 2.5 (2) that include all annual costs in rates.

The rate per m3 is foreseen to be about \$2.43/m3 up from the \$2.05 projected in earlier plans primarily due to increase purchase costs for treated water and reduced volume projections for Members. By year 2021, all Members are expected to be drawing water from the System to some degree and the Commission would be nearing the point where a shift to all costs in the rates may be considered. The estimated rate per m3 of this approach would be perhaps about \$3.32 /m3.

## 6.3.4 Minimum Volume Charges

The rate set out sub-section 6.3.2 is calculated assuming a certain volume of water annually from the Members. Members, however, will be charged on the actual volume of water delivered to Member by the System. To ensure that the Commission is able to meet fixed costs for operation of the System, Members will be required in advance of each year to estimate the anticipated volume of water for the ensuring year. A Member will be charged for either the actual volume of water or 90% of the estimated volume whichever is higher.

Table 6.3.1
Shirley McClellan Regional Water System
Possible Financial Picture and Rate Projection for Year 2021

			t Recovery roach	Full Cost
	Full Connection at Year 2021	Direct Recovery from Members	Recovered through Rates	Recovery From Rates
Capital Cost and Financing	*	g-		·
Total Capital Cost for Entire System	\$91,891,872			
Less: Total Grant Funding	(\$81,973,331)			
Net Commission Share to be Borrowed	\$9,918,540			
Annual Debenture Payments	\$558,064	\$558,064		\$558,064
Annual Governance and Administration Costs	\$97,971	\$97,971		\$97,971
Annual Volume of Water (m3)	741,649		741,649	741,649
Operating Costs				
Purchase of Treated Water	\$1,173,096		\$1,173,096	\$1,173,096
Transmission System O and M	\$421,987		\$421,987	\$421,987
Transfer Station O and M	\$160,256		\$160,256	\$160,256
Transfer to Operating Reserves	\$25,000		\$25,000	\$25,000
Transfer to Capital Reserves	\$75,000		\$75,000	\$75,000
Operating Costs to be Recovered	\$1,855,338	\$0	\$1,855,338	\$1,855,338
Total Costs	\$2,511,373	\$656,035	\$1,855,338	\$2,511,373
Rate Calculation				
Total Costs to be Recoverd through Rates			\$1,855,338	\$2,511,373
Less: Other Revenue		59	(\$50,967)	(\$50,967)
Net Costs to be Recovered			\$1,804,371	\$2,460,406
Rate per m3 Required (Cash Basis)			\$2.43	\$3.32

## 6.3.5 Rate Comparisons

The comparison of rates among municipal and regional water services is to be approached with caution, given that the circumstances and context of each system can be quite different from one another. The conclusion that the cost of the service is reasonable and sustainable will often be based on the availability of alternatives.

Each of the Municipalities must secure a long term source of quality water to ensure their respective viability and in some cases their very existence. The

collective cost of each Municipality addressing this need on its own is prohibitively expensive. Financially the municipalities have no other option but to develop a common water supply and transmission system and are to be prepared to accept the costs accordingly.

These per m<sup>3</sup> rates would compare to the following regional water supply systems in Alberta:

- a. Aspen \$2.95
- b. Mountain View \$1.30
- c. Westlock \$1.85,
- d. North Red Deer \$2.05,
- e. Highway 12/21 \$2.35,
- f. AquaSeven (Kneehill) \$3.10, and
- g. Barrhead \$1.80

The Shirley McClellan System is characterized by a lengthy transmission pipeline system with low population densities. (400 km, 20,000 population) The Aspen, Highway 12 / 21, and Kneehill systems share this characteristic and, when compared to theses other systems, the Shirley McClellan rates would appear to be in line. Westlock, Barrhead and Mountain View are supplied from their own water treatment plants for which little or no capital cost in the rates are being included. Mountain View has the advantage of higher population densities on a system of shorter length (78 km, 29,000 population) However, it must be remembered that the debenture debt repayment are not contained in the rates but rather are paid directly by the Member. For example the rate in 2014 of \$2.24 / m3 would need to rise to \$2.90 / m3 if governance and administration costs and debt repayment costs are included.

# 6.4 Financial Summary

A summary of the Income Statement and selected Balance Sheet items are set out in Tables 6.4 and 6.5 respectively. Table 6.6 identifies the contributions of each Member.

On a cash basis, the financial year 2013 is expected to generate a modest surplus of about \$30,000, despite the payment of past year's rate "true up" for water purchases from the Town of Stettler. The rates identified for 2014 – 2017 are projected to generate similar surpluses of \$20,000 to \$35,000 annually. On an accrued basis however, the Commission operates in a consistent deficit position, in that the Commission revenue is not sufficient to cover the cost of the amortization of fixed (tangible) assets. As an example, the rate that would be required in 2014 to fund accrued expenses would be \$4.25 per m3. The Commission over the long term will seek to cover an increasing portion of the annual accrued deficit.

At the conclusion of the financial year 2017, the Commission will have accumulated \$275,000 in a reserve for operating and capital purposes. Tangible Capital Asset

valuations are set out in Table 6.5. Pipelines are amortized over 75 years, Water Transfer Station structure over 45 years while electronic machinery and equipment is amortized over 5 years. The value of land is not amortized.

Table 6.4
Shirley McClellan Regional Water System
Summary of Income Statement Items
Years 2013 - 2017

	2013 Budget	2014 Budget	2015 Projected	2016 Projected	2017 Projected
Projected Volume of Water to Members (m3)	389,268	444,312	495,148	527,810	544,148
Cash Revenue					
Rates from Connected Members Interest Income, Dividends	\$871,960	\$995,259	\$1,109,132	\$1,182,294	\$1,218,892
Town of Stettler - Water Transfer Station Direct Contributions from Members	\$43,500	\$44,370	\$45,257	\$46,163	\$47,086
Governance and Administration	\$169,850	\$85,937	\$87,556	\$89,207	\$90,891
Debenture Costs	\$230,979	\$230,979	\$326,868	\$357,821	\$357,821
Total Revenue	\$1,316,289	\$1,356,544	\$1,568,814	\$1,675,485	\$1,714,690
Cash Expenditures	7				
Governance and Administration	\$169,850	\$85,937	\$87,556	\$89,207	\$90,891
Purchase of Water	\$590,512	\$611,818	\$695,456	\$756,157	\$795,155
Transmission Lines O and M	\$212,500	\$238,425	\$255,353	\$273,483	\$292,901
Transfer Station O and M	\$80,700	\$90,545	\$96,974	\$103,859	\$111,233
Transfer to Reserves	\$0	\$75,000	\$75,000	\$75,000	\$50,000
Transfer to Reserves  Debenture Debt Payments	\$0 \$230,979	\$75,000 \$230,979	\$75,000 \$326,868	\$75,000 \$357,821	\$50,000 \$357,821
			The state of the s	The state of the s	

Table 6.5 Shirley McClellan Regional Water System Summary of Balance Sheet Items Years 2013 - 2017

	2013	2014	2015	2016	2017
Tangible Assets					
Pipelines					
Opening Balance	\$33,458,643	\$39,342,474	\$47,573,956	\$49,047,139	\$51,140,925
Add: Constructed Assets	\$6,317,068	\$8,748,947	\$2,107,300	\$2,756,000	\$8,190,725
Less: Amortization	(\$433,237)	(\$517,465)	(\$634,117)	(\$662,215)	(\$698,961)
Closing Balance	\$39,342,474	\$47,573,956	\$49,047,139	\$51,140,925	\$58,632,688
Transfer Station					
Opening Balance	\$9,702,859	\$9,470,500	\$9,238,142	\$9,005,784	\$8,773,426
Add: Constructed Assets	\$0	\$0	\$0	\$0	\$0
Less: Amortization	(\$232,358)	(\$232,358)	(\$232,358)	(\$232,358)	(\$232,358)
Closing Balance	\$9,470,500	\$9,238,142	\$9,005,784	\$8,773,426	\$8,541,068
Land					
Opening Balance	\$117,899	\$117,899	\$117,899	\$117,899	\$117,899
Add: Constructed Assets					
Less: Amortization	P				
Closing Balance	\$117,899	\$117,899	\$117,899	\$117,899	\$117,899
Machinery and Equipment					
Opening Balance	\$154,287	\$68,889	(\$12,349)	(\$12,349)	(\$12,349)
Add: Constructed Assets	\$0	\$0	\$0	\$0	\$0
Less: Amortization	(\$85,398)	(\$81,238)	\$0	\$0	(\$931,319)
Closing Balance	\$68,889	(\$12,349)	(\$12,349)	(\$12,349)	(\$943,668)
Total Asset Value	\$48,999,763	\$56,917,649	\$58,158,474	\$60,019,901	\$66,347,987
Liabilities					
Operating Reserve					
Opening Balance	\$0	\$0	\$25,000	\$50,000	\$75,000
Additions	\$0	\$25,000	\$25,000	\$25,000	\$25,000
(Withdrawals)					
Closing Balance	\$0	\$25,000	\$50,000	\$75,000	\$100,000
Capital Reserve					
Opening Balance	\$0	\$0	\$50,000	\$100,000	\$150,000
Additions	\$0	\$50,000	\$50,000	\$50,000	\$25,000
(Withdrawals)	7				
Closing Balance	\$0	\$50,000	\$100,000	\$150,000	\$175,000
Unrestricted Operating Fund Accumul					
Opening Balance	\$687,349	\$719,098	\$742,938	\$774,545	\$794,502
Additions	\$31,749	\$23,841	\$31,607	\$19,957	\$16,689
(Withdrawals)		-	2		
Closing Balance	\$719,098	\$742,938	\$774,545	\$794,502	\$811,192

Table 6.6
Shirley McClellan Regional Water System
Summary of Contributions and Charges by Member
Years 2013- 2017

	_				т.	
		2013	2014	2015	2016	2017
Camrose County	12.3%					
Rates	12.570	\$0	\$0	\$0	\$5,389	\$8,246
Direct Contributions		ŞÜ	70	JU	\$3,363	30,240
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$28,486	\$28,486	\$40,312	\$44,129	\$44,129
Total	_	\$33,758	\$33,857	\$45,784	\$55,094	\$58,055
Total		Ş33,736	Ş33,637	343,764	\$55,054	336,033
Lacombe County	2.0%					
Rates		\$0	\$0	\$0	\$0	\$0
Direct Contributions		**	10.77	,	7-	-
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$4,561	\$4,561	\$6,454	\$7,066	\$7,066
Total	-	\$9,833	\$9,932	\$11,927	\$12,641	\$12,746
		7-/	¥-/	¥/	¥/-	,,· · · ·
Paintearth County	10.0%					
Rates		\$8,512	\$8,512	\$8,512	\$9,833	\$9,846
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$23,011	\$23,011	\$32,564	\$35,647	\$35,647
Total		\$36,795	\$36,894	\$46,548	\$51,056	\$51,174
Stettler County	36.4%					
Rates		\$5,600	\$10,451	\$72,996	\$125,348	\$142,729
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture	_	\$84,118	\$84,118	\$119,039	\$130,312	\$130,312
Total		\$94,990	\$99,940	\$197,508	\$261,235	\$278,721
	11000					
Town of Castor	5.8%	*******				**********
Rates		\$264,320	\$272,062	\$274,782	\$277,530	\$280,306
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$13,355	\$13,355	\$18,899	\$20,689	\$20,689
Total		\$282,947	\$290,788	\$299,154	\$303,794	\$306,675
Town of Coronation	6.6%					
Rates	0.070	\$253,120	\$262,429	\$265,053	\$267,704	\$270,381
Direct Contributions		\$255,120	7202,429	\$203,033	3207,704	3270,301
		¢F 272	ĆE 274	¢E 473	ČE EZE	¢E 604
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture	_	\$15,340	\$15,340	\$21,709	\$23,764	\$23,764
Total		\$253,120	\$262,429	\$265,053	\$267,704	\$270,381

Table 6.6
Shirley McClellan Regional Water System
Summary of Contributions and Charges by Member
Years 2013- 2017

		2013	2014	2015	2016	2017
Village of Bawlf	2.2%					
Rates		\$0	\$0	\$0	\$0	\$0
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$5,019	\$5,019	\$7,103	\$7,776	\$7,776
Total	_	\$10,291	\$10,390	\$12,575	\$13,351	\$13,456
Village of Big Valley	2.1%					
Rates	2.2.0	\$40,880	\$82,662	\$83,076	\$83,491	\$83,908
Direct Contributions		\$ 10,000	<b>402,002</b>	<b>403,070</b>	Ų03,131	<b>703,300</b>
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$4,856	\$4,856	\$6,872	\$7,523	\$7,523
Total	_	\$51,008	\$92,890	\$95,420	\$96,589	\$97,112
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ψο 2,000	452,050	<b>430)</b> ,20	420,002	42.722
Village of Consort	3.9%					
Rates		\$211,496	\$215,723	\$217,880	\$220,059	\$222,259
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$9,056	\$9,056	\$12,815	\$14,028	\$14,028
Total	_	\$225,824	\$230,149	\$236,167	\$239,663	\$241,969
Village of Donalda	1.4%					
Rates	1.170	\$0	\$52,654	\$70,907	\$71,616	\$72,332
Direct Contributions		40	ψ32,03	φ, ο,σο,	ψ, 1,010	ψ, 2,002
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$3,285	\$3,285	\$4,649	\$5,089	\$5,089
Total	<del></del>	\$8,557	\$61,310	\$81,028	\$82,281	\$83,102
Village of Halkirk	0.7%					
Rates		\$21,504	\$22,707	\$29,793	\$30,687	\$31,608
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture	_	\$1,665	\$1,665	\$2,356	\$2,579	\$2,579
Total		\$28,441	\$29,742	\$37,621	\$38,842	\$39,867
Village of Rosalind	1.2%					
Rates		\$0	\$0	\$0	\$0	\$0
<b>Direct Contributions</b>				•	4.14	j* (1002)
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$2,802	\$2,802	\$3,965	\$4,340	\$4,340
Total	_	\$8,074	\$8,173	\$9,437	\$9,916	\$10,021
						The state of the s

Table 6.6
Shirley McClellan Regional Water System
Summary of Contributions and Charges by Member
Years 2013- 2017

		2013	2014	2015	2016	2017
Village of Veteran	1.8%		•	•		
Rates		\$56,000	\$56,860	\$57,145	\$57,430	\$57,717
Direct Contributions						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$4,171	\$4,171	\$5,902	\$6,461	\$6,461
Total	-	\$65,443	\$66,402	\$68,519	\$69,467	\$69,859
SV of Rochon Sands	1.6%					
Rates	-1010	\$0	\$0	\$0	\$2,938	\$9,077
Direct Contributions		,	,		, -,-	
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture		\$3,596	\$3,596	\$5,089	\$5,571	\$5,571
Total	-	\$8,868	\$8,967	\$10,561	\$14,084	\$20,328
SV of White Sands	1.48%					
Rates		\$0	\$0	\$0	\$1,103	\$1,136
Service Charges						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture	<u>=</u>	\$3,408	\$3,408	\$4,823	\$5,280	\$5,280
Total	-	\$8,680	\$8,779	\$10,295	\$11,959	\$12,097
Special Areas 2, 3 and 4	10.50%					
Rates		\$10,528	\$11,200	\$28,988	\$29,166	\$29,346
Service Charges						
Govern/Admin		\$5,272	\$5,371	\$5,472	\$5,575	\$5,681
Debenture	<u></u>	\$24,250	\$24,250	\$34,318	\$37,568	\$37,568
Total	_	\$40,050	\$40,821	\$68,778	\$72,309	\$72,594
Financial Model Balance Check		100.00%				
		\$7,319,946	\$7,319,946			

# 7. Risks and Barriers

To meet the needs of the urban and rural communities for a long term assured supply of safe water, the municipalities in East Central Alberta as Members of the Shirley McClellan Regional Water Services Commission contemplate the staged development of the complete System as expressed in this Business Plan. Significant funds, nearly \$60 Million, have already been expended or committed to be expended with the development of the East Transmission Line to Consort and lines to Big Valley and Donalda. Ninety per cent (90%) of these costs funded by the Government of Alberta through the Water for Life Program . The Commission has set out in the Plan the staged development over the next 8 years of much of the remainder of the System.

As to the completion of the rest of the stages of the System, the approach laid out in the Business Plan, relying as it does on the 90/10 funding levels of the Water for Life program, allows the continued development of the System over an 8 year period with water rates, while high, are acceptable and affordable. If there is a delay in receiving Water for Life funding (or a similar magnitude of alternative funding from provincial or federal government sources) or the funds are simply unavailable for any of the subsequent stages of System development, the Commission would not be able to proceed with the planned construction. Already needing Ministerial approval to borrow a 10% share, the Commission would simply be unable to carry the significant amount of capital borrowing that would be needed.

For those Members with existing systems, these communities would need to continue using their existing sources of water supply until the regional source becomes available. For some, this may be possible without serious implications. For others, however, the adequacy of existing systems in terms of quantity and quality will be such that there would be the status quo would not be an option. Where water quality and safety with existing supply are an issue, there would be no alternative but to undertake improvements to existing water supply systems in order to bridge the gap until a regional supply arrives. These expenditures could be quite expensive, would be at the cost of the Member and would ultimately be a lost investment. If current supply is unable to provide the quantity of water needed, then the community would be faced with curtailing growth and expansion in an area where growth is of great importance to future viability of municipalities in East Central Alberta.

In cases where Members had planned new distribution systems to serve existing hamlet and rural populations and provide an alternative to private dependence on depleting or undrinkable groundwater sources, these initiatives could not go ahead.

# 8. Due Diligence

The Member municipalities have demonstrated due diligence in regards to their approach to this project and the decisions that have been made. The Members have:

- a. Commissioned the preparation of detailed engineering studies and carefully considered the information presented,
- b. Considered a number of options of water supply,
- c. Worked closely with:
  - i. Alberta Environment to plan a system that would meet the environmental objectives of the Members and the Province of Alberta, and
  - ii. Alberta Transportation to plan and begin construction of a system that meet the objectives of the Water for Life Program and secure funding under that program.
- d. Engaged a team of consultants well experienced in the design and construction of water systems and the development and operation of regional services commissions:
  - i. Stantec Consulting Ltd,
  - ii. C & J Vanco with principal John Van Doesburg, and
  - iii. R Jenkins Consulting Ltd. with principal Robert Jenkins,

This due diligence is further reflected in the scope and detail of this Plan which:

- a. Sets out clearly the need and viability of this project, and
- b. Will form a sound basis upon which this important regional service will proceed.

# Appendix A Shirley McClellan Regional Water Services Commission Regulation

## **ALBERTA REGULATION 212/2007**

### **Municipal Government Act**

## Table of Contents

- 1 Establishment
- 2 Members
- 3 Water supply system
- 4 Operating deficits
- 5 Sale of property
- 6 Profit and surpluses
- 7 Approval

#### **Establishment**

1 A regional services commission known as the Shirley McClellan Regional Water Services Commission is established.

#### **Members**

- **2** The following municipal authorities are members of the Commission:
  - (a) Camrose County;
  - (b) Lacombe County;
  - (c) County of Paintearth No. 18;
  - (d) The County of Stettler No. 6;
  - (e) Town of Castor;
  - (f) Town of Coronation;
  - (g) Village of Bawlf;
  - (h) Village of Big Valley;
  - (i) Village of Consort;
  - (j) Village of Donalda;
  - (k) Village of Halkirk;
  - (l) Village of Rosalind;
  - (m) Village of Veteran;
  - (n) Summer Village of Rochon Sands;
  - (o) Summer Village of White Sands;

- (p) Special Area No. 2;
- (q) Special Area No. 3;
- (r) Special Area No. 4.

#### Water supply system

**3** The Commission is authorized to provide and operate a water supply system.

#### **Operating deficits**

**4** The Commission may not assume operating deficits that are shown on the books of any of the member municipalities.

#### Sale of property

- **5**(1) The Commission may not, without the approval of the Minister, sell any of its land, buildings, equipment or inventory whose purchase has been funded wholly or partly by grants from the Government of Alberta.
- (2) The Minister may not approve a sale under subsection (1) unless the Minister is satisfied
  - (a) as to the repayment of the grants from the Government of Alberta and outstanding debt associated with that portion of the land, buildings, equipment or inventory to be sold,
  - (b) that the sale would not have a significant adverse effect on the services the Commission provides, and
  - (c) that the sale will be properly reflected in the rates subsequently charged to the customers of the Commission.

### **Profit and surpluses**

- **6** Unless otherwise approved by the Minister, the Commission may not
  - (a) operate for the purposes of making a profit, or
  - (b) distribute any of its surpluses to its member municipalities.

#### **Approval**

**7** The Minister may make an approval under section 5 or 6 subject to any terms or conditions the Minister considers appropriate.

# **Appendix B – Commission Bylaws**

#### SHIRLEY MCCLELLAN REGIONAL WATER SERVICES COMMISSION

## **Bylaw No. 7-12**

Being a By-Law of the Shirley McClellan Regional Water Services Commission in the Province of Alberta (Commission) respecting the appointment of a Board of Directors, Chair and Vice Chair

**BYLAW No. 7-12** of the Shirley McClellan Regional Water Services Commission being a bylaw to repeal Bylaw 5-11 which was adopted on November 09, 2011 and Bylaw 1 which was adopted on November 24, 2007 with Ministerial approval granted on June 4, 2008.

WHEREAS pursuant to the provisions of the *Municipal Government Act*, R.S.A. 2000, c. M-26; the Board of the Commission must pass a Bylaw respecting the appointment of its Directors and the designation of its Chair, and

WHEREAS such Bylaw requires does not come into effect until the approved by the Minister of Municipal Affairs.

**NOW THEREFORE** the Board of Shirley McClellan Regional Water Services Commission, duly assembled, enacts the following:

### 1. DEFINITIONS

- "Act" means the Municipal Government Act, R.S.A. 2000, c. M-26;
- "Board" means the Board of Directors of the Commission;
- 1.3 "Chair" means the Chairperson of the Board;
- 1.4 "Commission" means the Shirley McClellan Regional Water Services Commission;
- 1.5 "Director(s)" means the representative of a Member to the Board (the representatives of the Members to the Board) appointed in accordance with this Bylaw;
- "Member(s)" means that Member (or those Members) of the Commission set out in the Regulation;
- 1.7 "Regulation" means Alberta Regulation AR 212/2007;

#### 2. BOARD OF DIRECTORS

- 2.1 The Board shall consist of Sixteen (16) Directors and be composed of One (1) Director representing each Member and One (1) Director representing Special Areas No. 2, Special Areas No. 3 and Special Areas No. 4 as appointed by the municipal council and/or board of the Member from among the Member's elected officials;
- 2.2 A Member may revoke its appointment of a Director and may appoint a replacement Director.
- An alternate Director, as appointed by a Member, is entitled to act in the place of the Director in respect of who he is named as alternate when the original Director is absent or not able to attend a meeting of the Board.
- When an alternate Director acts in place for a Director, the alternate Director is a member of the Board for all purposes.

## 3. CHAIR AND VICE CHAIR

- 3.1 The Directors shall elect, from amongst their number, the Chair and the Vice-Chair at the first Regular Meeting of the Board in November of each year.
- 3.2 The term of office of the Chair and Vice Chair is one year.

## 4. AMENDMENT

- 4.1 In accordance to section 602.07(2) of the Act, a bylaw to amend this Bylaw does not come into force until the bylaw is passed by a three quarters majority of the Directors and approved by the Minister of Municipal Affairs.
- Written notice of a proposed amendment to this Bylaw shall be provided to each Director and each Member not less than thirty (30) days in advance of the meeting at which the amendment is to be considered.

#### 5. REPEAL

Bylaw No. 7-12 hereby repeals Bylaw No. 5-11, passed November 9, 2011 and Bylaw No 1, passed November 24, 2007 with Ministerial approval granted on June 4, 2008.

## 6. BYLAW IN FORCE

6.1 In accordance to section 602.07(2) of the Act, this Bylaw shall come into force and effect upon approval by the Minister of Municipal Affairs.

GIVEN FIRST, SECON D AND, WITH UNANIMOUS APPROVAL, THIRD READING this  $26^{\rm th}$  day of January 2012

COMMISSION CHAIR

COMMISSION MANAGER

Approved by the Minister of Municipal Affairs this 10th day of February 2012

Minister of Municipal Affairs

## SHIRLEY MCCLELLAN REGIONAL WATER SERVICES COMMISSION

## Bylaw No. 6-11

Being a By-Law of the Shirley McClellan Regional Water Services Commission in the Province of Alberta (Commission) respecting the Operation of the Commission and Provision of Services

WHEREAS appointment of the Board of Directors and the selection of Chair and Vice Chair of the Board has been established under Bylaw No. 5-11, and

WHEREAS pursuant to the provisions of the Municipal Government Act, the Board of the Commission may pass Bylaws

- 1. respecting the provision of the commission's services;
- 2. governing the administration of the commission.

**NOW THEREFORE** the Board of Shirley McClellan Regional Water Services Commission, duly assembled, enacts the following:

#### 1. DEFINITIONS

- 1.1. "Act" means the Municipal Government Act, R.S.A. 2000, c. M-26;
- 1.2. "Annual Meeting" means the Meeting of the Board and the Members to be held on a date and at a location to be determined by the Board in accordance with this Bylaw;
- 1.3. "Auditor" means the auditor of the Commission appointed by the Board pursuant to Section 9 hereof;
- 1.4. "Board" means the Board of Directors of the Commission;
- 1.5. "Budget" means the capital budget and the operating budget required by the Act;
- 1.6. "Chair" means the chairperson of the Board, selected in accordance with Bylaw No. 5-11;
- 1.7. "Commission" means the means the Shirley McClellan Regional Water Services Commission established under the Regulation;
- 1.8. "Director" means the representative of a Member on the Board appointed in accordance with Bylaw No. 5-11;
- 1.9. "Financial Plan" means the financial plan for the Commission for the forthcoming three (3) financial years, as it exists from year to year;

- 1.10. "Manager" means the person appointed by the Board as Manager in accordance with Section 8 of this Bylaw;
- 1.11. "Member(s)" means the member(s) of the Commission as set out in the Regulation;
- 1.12. "Regulation" means Alberta Regulation AR 212/2007;
- 1.13. "Regular Meeting" means the meetings of the Board to be held each year on dates and at locations to be determined by resolution of the Board pursuant to Paragraph 6.1 hereof;
- 1.14. "System" means the water transfer station, transmission pipelines, reservoirs, pump stations and control systems operated by the Commission for the purpose of providing water to the members and customers of the Commission.
- 1.15. "Special Meeting" means a meeting of the Board called in accordance with Paragraph 6.2 of this Bylaw;
- 1.16. "Vice Chair" means the vice chairperson of the Board, selected in accordance with Bylaw No. 5-11;
- 1.17. "Water Services" means all treated water services provided by the Commission; and

All other words in this Bylaw are as defined or used in the Act or the Regulation.

#### 2. OBJECT

The object of the Commission is to provide wholesale treated water services to its Members.

#### 3. MANAGEMENT

The management of this Commission shall be vested in the Board.

## 4. BOARD OF DIRECTORS

- 4.1. The proceedings of the Board shall be conducted in accordance with the Act and this Bylaw.
- 4.2. The Board shall be responsible for the management and conduct of the affairs of the Commission, which responsibility shall include, but not be limited to, the following:

- (a) to approve the Financial Plan for the forthcoming three (3) years and the Budget for the forthcoming year;
- (b) to maintain the operations of the Commission in a manner which benefits the Members; and
- (c) to cause the minute books and financial records of the Commission to be maintained and to make the same available to the Members.
- 4.3. The Directors shall receive for attending any Board meeting or for carrying out any Director's responsibilities, meeting fees and expenses including travel expenses as permitted by the rates and fees set out the Financial Plan and Budget.

#### 5. OFFICERS

- 5.1. The Chair shall preside over the Annual Meeting, each Regular and Special Meeting and any meetings of any committee of the Commission.
- 5.2. The Chair shall appoint all officials and committees as directed by the Board.
- 5.3. The Chair shall be an ex-officio member of all committees.
- 5.4. The Chair shall vote on all matters before the Board.
- 5.5. The Chair shall perform all other and such other duties as are usually performed by the Chair.
- 5.6. The Vice-Chair shall act and perform the duties of the Chair in the absence of the Chair or the Chair's inability to perform the duties of the Chair.
- 5.7. In the absence of the Chair at any meeting, the Vice-Chair shall preside over the meeting for that meeting only.
- 5.8. During the absence or inability of the Chair and Vice-Chair, a Director appointed by the Board for that purpose shall exercise the duties and powers of the Chair.
- 5.9. The Board in its discretion may appoint other Officers from time to time.
- 5.10. In addition to the duties set forth herein, the Officers shall have such duties as the Board may from time to time determine.

## 6. MEETINGS OF THE BOARD OF DIRECTORS

6.1. The Board, by resolution, shall establish the dates and number of Regular Meetings held during a year, however, there shall be not less than two (2) Regular Meetings per year.

#### 6.2. The Chair:

- (a) may call a Special Meeting at the discretion of the Chair; and
- (b) shall call a Special Meeting upon receipt of written request by at least Five (5) Directors.
- 6.3. Notice of the time and place of every Board meeting shall be given to each Director personally, by telephone or by facsimile transmission or by any other electronic medium not less than forty-eight (48) hours before the time fixed for the holding of such Board meeting, provided that any Board meeting may be held at any time and place without such notice if:
  - (a) all the Directors are present thereat and signify their waiver of such notice at such meeting; or
  - (b) All the Directors present thereat signify their waiver of such notice and all the Directors that are absent have signified their consent to the meeting being held in their absence.
- 6.4. A Director may participate in a Board meeting or in a meeting of a committee of the Board by means of telephone conference or other electronic communications medium that permits each of the Directors to hear each of the other Directors and to be heard by each of the other Directors.
- 6.5. The Chair shall establish the agenda for any meeting of the Board. Directors shall be entitled to add items to the proposed agenda by submitting a written request to the Manager at least twenty-four (24) hours before the meeting.
- 6.6. The Board shall adopt the agenda at the beginning of the meeting and may, upon agreement of two thirds of those Directors present at the meeting, add or delete items from the agenda.
- 6.7. Any matter properly placed before a meeting of the Board shall be decided by a majority of the votes cast by the Directors present at the relevant Board Meeting.
- 6.8. A quorum of the Board shall be a majority of the Directors.

#### 7. ANNUAL MEETING

7.1. The Board shall call an Annual Meeting which shall be held no later than April 30th of each year.

- 7.2. Written notice of the Annual Meeting shall be provided to each Member by mail postmarked not less than thirty (30) days prior to the date of the Annual Meeting.
- 7.3. At the Annual Meeting, the Auditor shall present the audited financial statements of the Commission and the Chair shall report on the activities of the past year of the Board and the future plans of the Commission.

## 8. MANAGER

- 8.1. The Board shall appoint a Manager and may select:
  - (a) an individual that is an employee of the Commission; or
  - (b) an individual, municipality, or firm engaged on a contractual basis;

on such terms and conditions as may be acceptable to the Board.

- 8.2. The Manager shall act as the administrative head of the Commission and without limiting the foregoing, the Manager shall:
  - (a) ensure that the policies and programs of the Commission are implemented;
  - (b) advise and inform the Board on the operations and affairs of the Commission;
  - (c) maintain custody of the seal of the Commission and when required on any instrument requiring the seal of the Commission, affix the same together with one of the Chair or the Vice-Chair:
  - (d) perform the duties and exercise the powers assigned to the Manager in this Bylaw
  - (e) perform the duties and exercise the powers required of the Manager in the Act or any other applicable legislation;
  - (f) cause the funds of the Commission to be received and disbursed in accordance with the directions of the Board, subject to this Bylaw;
  - (g) cause to be kept detailed accounts of all income and expenditures including proper vouchers for all disbursements of the Commission;
  - (h) cause to be rendered to the Board at Regular Meetings or whenever required by the Board an account of all transactions of the Commission and the financial position of the Commission;

- (i) cause all facts and minutes of all proceedings to be kept on all meetings of the Commission;
- (j) cause all notices to be given to Members and to Directors required by this Bylaw;
- (k) cause to be kept all books, papers, records, correspondence, contracts and other documents belonging to the Commission and shall cause the same to be delivered up when required by the *Act* or when authorized by the Board to such person as may be named by the Board; and
- (l) shall carry out any lawful direction of the Board from time to time.
- 8.3. Either the Chair or Vice-Chair, together with the Manager are authorized to execute and deliver any cheques, promissory notes, bills of exchange and other instruments, whether negotiable or not, on behalf of the Commission.
- 8.4. The Board may, from time to time, appoint an acting manager who shall be authorized, in the absence the Manager, to perform such duties of the Manager as the Board may prescribe.
- 8.5. Members shall have the right to inspect and may obtain extracts or copies of all books and records of the Commission.

## 9. AUDITOR

- 9.1. The Board shall appoint an Auditor who shall report to the Board on the annual financial statement of the Commission and on the financial procedures and activities of the Commission.
- 9.2. The Board shall appoint the Auditor at the first meeting of the Board following the Annual Meeting for the ensuing year.

## 10. VOLUME OF WATER SUPPLIED

10.1. Each member of the Commission shall be entitled to the following minimum annual allocations in cubic meters per year:

Camrose County	$624,\!554$	Village of Consort	198,544
Lacombe County	100,000	Village of Donalda	72,027
Paintearth County	504,515	Village of Halkirk	36,500
Stettler County	1,844,291	Village of Rosalind	61,430
Town of Castor	292,805	Village of Veteran	91,443
Town of Coronation	336,334	Summer Village of Rochon Sands	78,840
Village of Bawlf	110,048	Summer Village of White Sands	74,724
Village of Big Valley	106,474	Special Areas, 2,3 and 4	531,691

and the Commission shall undertake to provide capacity within the System to supply the volume of water annually requested by each member. The Commission may at its discretion, provide to Members volumes of water exceeding these allocations.

- 10.2. Members shall provide the Commission in the fall of each year, a request for water for the next ensuing year, based on a reasonable estimate of the volume of water expected to be required to meet the needs of the Member's customers in that next year, together with a forecast of volumes anticipated to be required by the member for the second through fifth ensuing years.
- 10.3. Where the capacity of the system is insufficient to deliver the water requested by the Members, the Members shall be allocated the available capacity proportionately based on the previous year's volumes, until such time as the Commission is able to fully supply the volume required.

#### 11. FINANCIAL

- 11.1. The financial year of the Commission shall be the calendar year.
- 11.2. Without limiting the requirements for the Budget pursuant to the Act, the Board in fall of each year will prepare the Financial Plan for the forthcoming three (3) financial years and a Budget for the next financial year which will set out the:
  - (a) expected consumption requirements of the Members;
  - (b) estimate expenditures for the:
    - (i) operations of the Board and Manager;
    - (ii) operations of the system;
    - (iii) purchase of water;
    - (iv) transfer to operating reserves;
    - (v) repayment of debt obligations;
    - (vi) transfer to capital reserves;
    - (vii) non cash expenditures; and
    - (viii) return on equity and investments;
  - (c) estimated revenue requirements to meet the expenditures of the Commission and the rates and fees to be charged to Members and customers of the Commission;
  - (d) second and third year projections of operating expenditure, revenue requirements and rate trends;

- (e) capital projects planned and expected to completed in the forthcoming financial year and the second and third financial years of the Financial Plan;
- (f) estimated costs and sources of revenue for each year of the Financial Plan;
- (g) rates of remuneration and expenses to be provided to the Directors.
- 11.3. Subject to and in accordance with the Act and the Budget, the Commission may:
  - (a) accumulate operating surplus funds to an amount up to but not exceeding 50% of the annual operating expenditures in any year; and
  - (b) accumulate capital reserve funds to an amount up to but not exceeding the total expected capital expenditures in the three years of the Financial Plan and Budget.
- 11.4. Each Director shall be entitled to vote on the Budget and on the Financial Plan.
- 11.5. Upon receipt of authorization from the Board to distribute the proposed Budget and Financial Plan, the Manager shall distribute to each Director and each Member a complete copy of the proposed Budget and Financial Plan for the relevant financial year.
- 11.6. Any Member may submit comments and questions to the Board in writing in relation to the Budget and the Financial Plan within thirty (30) days immediately following the date of distribution of the Budget and the Financial Plan.
- 11.7. At the next meeting of the Commission after the thirtieth (30th) day immediately following the date of distribution of the Budget and the Financial Plan, the Directors shall finalize and approve the Budget and the Financial Plan for the relevant financial year. Approval of the Financial Plan and Budget shall require a majority of votes cast by the Directors at the meeting to be in favour.
- 11.8. If the Budget and Financial Plan are not both approved by majority vote as aforesaid, the Manager shall, as soon as reasonably practicable thereafter, deliver to each Member a revised Budget and Financial Plan for review and comment and the process set out in Paragraphs 11.6 and 11.7 herein shall continue until the Budget and the Financial Plan for the relevant financial year have both been approved.
- 11.9. Subject to the Act, the Manager may, during any financial year, present to the Members amendments to the Budget and the Financial Plan for the then current financial year. Any amendments to the Budget and the Financial Plan shall be

- made in accordance with the procedure for approval of the Budget and the Financial Plan set forth in Paragraphs 11.5, 11.6, 11.7 and 11.8, herein.
- 11.10. The Commission shall set out in the annual Budget and Financial Plan, the rate to be charged by the Commission for providing Water Services to the Members and customers and such rates and fees shall be adopted by the Commission by Bylaw.
- 11.11. The estimated costs of the system shall be determined on a cost of service basis utilizing the principles set out in the American Water Works Association (AWWA) manuals of practice dealing with water rates and charges, as revised and updated from time to time, and in accordance with the findings and directives of the Alberta Utilities Board, such approach being commonly referred to as the "utility rate model" and shall include full recovery of the annual costs of the Commission for those cost components set out in Paragraphs 11.2 and 11.3.
- 11.12. The rate for water services to Members shall be a common rate, calculated by dividing the estimated costs of the system determined under Paragraph 11.11, by the total volume of water requested by the Members under Paragraph 10.2
- 11.13. Members shall pay to the Commission the product of the actual volume of water purchased by the Member in a year times the rate set out in Paragraph clause 11.10. Notwithstanding the actual volume of water purchased, the Member shall be responsible for a minimum payment to the Commission of 90% of the volume requested by the Member under Paragraph 9.2 times the rate set out in Paragraph 11.10
- 11.14. Notwithstanding Paragraph 11.13, until such time as all Members are purchasing water services from the Commission in actual proportions of volume approximating the proportions of volume set out in Paragraph 10.1, the Members shall be responsible for payment to the Commission annually:
  - (a) 1/"x" of the annual costs attributed to the Board and Manager as set out under sub-clause 11.2 (b)(i) where "x" is the number of Members of the Commission;
  - (b) "y" times the capital cost components for the System set out in subclauses 11.2 (b)(v)(vi)(vii) and (viii) where "y" is the ratio of the members volume allocation to the total volume allocation set out in Paragraph 10.1; and
  - (c) where water services are provided to a Member, the product of the actual volume of water purchased by the Member in a year times a rate per cubic meter set to recover annual operating cost components of the System set out in sub-clauses 11.2 (b)(ii)(iii) and (iv) subject to the minimum payment as provided in Paragraph 11.13.

#### 12. CUSTOMERS AND RESTRICTIONS IN USE OF WATER

- 12.1. The Commission shall not sell Water Services to a Member and a Member shall not resell Water Services to any customer for the purpose of the supply of Water Services for water flood injection into any geological subsurface structure or formation for oil and gas recovery.
- 12.2. The Commission may terminate the supply of water services to any Member for failure to pay for water services received from the Commission.

#### 13. CHANGE IN MEMBERSHIP

- 13.1. The Board may agree to the addition of a municipality as a Member of the Commission if sufficient capacity for the supply of water can be made available.
- 13.2. A new Member shall be required to pay an amount to be calculated at the time of application.
- 13.3. Any contribution received by the Commission under Paragraph 13.2 shall inure to the benefit of the existing Members in the proportion to the contribution of the existing members to the Commission from the date of inception of the Commission to the date of entry of any new member.
- 13.4. A Member may withdraw from membership of the Commission upon two (2) years notice. The withdrawing Member may sell the equity contributed by the Member during the Member's term of membership of the Commission to any other Member of the Commission for such compensation and on such terms as the parties may agree subject to the approval of the Board. However, the Commission or any Member shall not be obligated to purchase the withdrawing Member's proportionate share of the system. The Commission shall not utilize the capacity of the system related to the withdrawing Member's equity or utilize the withdrawing Member's water volume allocation without fair compensation.
- 13.5. The withdrawing Member shall still be responsible for any respective proportion of outstanding debt principle for which the Member is responsible and the Member shall either pay the outstanding principle and any accrued interest to the Commission or agree to continue to pay the respective share of the annual payments on the debt. Any proceeds to the Member from the sale of capacity under Paragraph 13.4 shall be firstly applied to the outstanding debt principle of the Member.
- 13.6. The addition of any new Member or the withdrawal of any Member shall be subject to the approval of the Government of Alberta.

## 14. AMENDMENTS

- 14.1. An amendment to this Bylaw may be passed by the Board upon a three quarters majority of the Directors of the Board.
- 14.2. Written notice of a proposed amendment to the Bylaw shall be provided to each Director and each Member not less than thirty (30) days in advance of the meeting at which the amendment is to be considered.

## 15. SEVERABILITY

15.1. Every provision of this Bylaw is independent of all other provisions and if any provision of this Bylaw is declared invalid for any reason by a Court of competent jurisdiction, all other provisions of this Bylaw shall remain valid and enforceable

## 16. BYLAW IN FORCE

16.1. This Bylaw shall come into force and effect upon final passing thereof.

READ A FIRST TIME this 14<sup>th</sup> day of September, 2011 READ A SECOND TIME this 9<sup>th</sup> day of November, 2011 READ A THIRD TIME this 9<sup>th</sup> day of November, 2011

CHAIR	
MANAGER	

# Appendix C Member Water Supply Agreement Template

THIS AGREEMENT made effective as of the, 20	_ day of
WATER SUPPLY AGREEMENT	
Shirley McClellan Regional Water Services Commission	

- and -

(the "Member")

(the "Commission")

## Introduction:

WHEREAS the Member desires to enter into an agreement with the Commission for the supply of water from the Shirley McClellan Paul Regional Water System (System) to the Member in order for the Member to provide water services to its customers;

**AND WHEREAS** the Member wishes to purchase Water from the Commission and the Commission wishes to sell and deliver Water to the Member;

**AND WHEREAS** the Member and the Commission recognize that conservation of water resources is an important goal;

**IN CONSIDERATION** of the mutual and other promises described in this Agreement, the Commission and the Member covenant and agree as follows:

## **1.** Definitions

In this Agreement, each of the following words shall have the meaning for that word described below unless expressly stated otherwise:

(a) Agreed Variance means the standard for accuracy for the Meter being tested as specified in the latest edition of the American Water Works Association 700 Series Standards;

- (b) Agreement means this Water Supply Agreement including the Introduction clauses, all attached Schedules and all documents produced or delivered according to the terms of this Agreement;
- (c) Annual Quantity means for each calendar year the quantity of Water for that year determined according to the provisions of attached Schedule "C";
- (d) **Best Efforts** means, in relation to the performance of an obligation, efforts that are sensible and practical, and involve the exercise of reasoned and sound judgment having regard to all of the relevant circumstances;
- **Bylaws** mean the Bylaws of the Commission that together set out the establishment and operation of the Commission.
- (f) Commission means the Shirley McClellan Regional Water Services Commission as established by Alberta Regulation AR 212/2007
- (g) Cross Connection means any physical connection to the System or to the Member's Distribution System by which Water may become contaminated;
- (h) **Delivery Pressures** means for each calendar year the Minimum Pressure and the Normal Pressure Range for that year;
- (i) Effective Date means the date of this Agreement;
- (j) **Equipment** means all necessary valves, pressure and flow controls, associated equipment and pipes required within a Meter Chamber, except the Meter;
- (k) Maximum Daily Quantity means for each day during a calendar year, the maximum quantity of Water for that day determined according to the provisions of the attached Schedule "C";
- (I) Members mean those Members of the Commission.
- (m) Members's Boundaries means
  - (i) the legal municipal boundary of those Members that are urban municipalities; or
  - (ii) the boundary of a specified area of those Members that are rural municipalities as shown in the attached Schedule "B";
- (n) **Meter** means the consumption measuring device owned by the Commission which is located in a Meter Chamber;
- (o) Meter Chamber means the physical structure which houses the Equipment and the Meter at which the Commission measures the quantity of Water delivered to the Member,

- (p) **Minimum Pressure** means for each calendar year, the minimum pressure for delivery of Water at the Point of Delivery for that year determined according to the provisions of the attached Schedule "D";
- (q) M³ means cubic meters;
- (r) Normal Pressure Range means for each calendar year, the normal pressure range for delivery of Water at the Point of Delivery for that year determined according to the provisions of the attached Schedule "D";
- (s) **Points of Delivery** means the places described in the attached Schedule "B" where Water is sold and delivered to the Member by the Commission;
- (t) Rate means the price for Water established from time to time by the Commission according to the provisions of the attached Schedule "E";
- (u) Schedules means those Schedules attached hereto which form part of this Agreement including:
  - (i) Schedule "A" The Member's Boundaries
  - (ii) Schedule "B" Points of Delivery and Meter Chambers
  - (iii) Schedule "C" Annual Quantity and Maximum Daily Quantity
  - (iv) Schedule "D" Delivery Pressures
  - (v) Schedule "E" Calculation of Rate and Minimum Payment
  - (vi) Schedule "F" Dispute Resolution Process
- (v) System means the Shirley McClellan Regional Water System operated by the Commission for the supply of Water
- (w) Town Supply Agreement means that certain agreement made between the Town of Stettler and the Commission for the supply of treated water for the System.
- (x) Water means treated water which is safe for human consumption
- (y) Watermain means a water pipe line under pressure used to supply or deliver Water.
- **2.** Supply and Use of Water
  - (a) The Commission agrees to sell and deliver Water to the Member according to the terms of this Agreement.
  - (b) The Member agrees to buy and accept delivery of Water from the Commission according to the terms of this Agreement.

- (c) The Member, during the term of this Agreement, shall obtain all of its water requirements from the Commission.
- (d) Subject to Sub-Clause (e) following, the Member may use or resell any or all of the Water delivered by the Commission to the Member for users and customers located:
  - (i) within the Member Boundaries; and
  - (ii) outside of the Member's Boundaries that have been authorized by the Commission to receive Water from the Member.
- (e) The Commission shall not sell Water Services to the Member and a Member shall not resell Water Services to any customer for injection into any geological subsurface structure or formation.
- (f) The Member and the Commission shall not allow or permit any Cross Connections.

## **3.** Points of Delivery and Metering of Water

- (a) The Commission shall determine the Point or Points of Delivery that the Commission requires to deliver Water from the System to the Member. The location of each Point of Delivery shall be described in Schedule "D".
- (b) The Member may require additional Points of Delivery beyond those required and provided by the Commission and, where authorized by the Commission at the request of the Member, Schedule D of this Agreement shall be amended to identify the additional Point of Delivery.
- (c) Each Point of Delivery will require a Meter Chamber through which the delivery of Water to the Member is controlled and measured.
- (d) For each Point of Delivery required by the Commission, the Commission at its sole expense shall be responsible for the construction, operation and upgrading of the Meter Chamber. The Commission shall retain ownership of the Meter Chamber and shall keep safe, maintain, repair and replace such Meter Chamber.
- (e) For each additional Point of Delivery required by the Member, the Member at its sole expense shall be responsible for the construction, operation and upgrading of the Meter Chamber except the Meter. With the exception of the Meter, the Member shall retain ownership of the Meter Chamber and shall keep safe, maintain, repair and replace such Meter Chamber.
- (f) The Commission shall provide, care for, maintain, repair and replace the Meters.
- (g) Once a year, the Commission may test a Meter for accuracy. The Commission shall pay for such tests and shall provide the results of the test to the Member.
- (h) Upon written request of the Member, the Commission shall test for accuracy any meter at the Points of Delivery to the Member. If the test indicates that the accuracy of a Meter exceeds the Agreed Variance, the Commission shall pay for the test. If the test

- does not indicate that the accuracy of a Meter exceeds the Agreed Variance, the Member shall pay for the test.
- (i) If at any time a Meter Chamber or a Meter is out of service or is being repaired so that the measurement of the volume of Water being delivered is not being recorded accurately within the Agreed Variance, or if a test determines that a Meter is not registering accurately within the Agreed Variance, the Meter Chamber or Meter shall be repaired or adjusted as soon as practical. The measurement shall be corrected for a period definitely known or agreed upon, or if not known or agreed upon, for one-half of the period since the last Meter test, and the measurements shall be determined or adjusted, as the case may be, to correct for the degree of inaccuracy using the best available data in the following priority:
  - (i) by using any check measuring equipment if installed and if accurately registering within the Agreed Variance;
  - (ii) by correcting the error, if the percentage of the error is ascertainable by calibration, test or mathematical calculation; or
  - (iii) by estimating the volume based upon deliveries under similar conditions during a period of time when the Meter Chamber and Meter were working accurately.
- (j) The Member shall allow the Commission reasonable access to all Meter Chambers at reasonable times for the purposes of performing its obligations to care for, maintain, repair, replace and test the Meters.

#### **4.** Volume and Pressure

- (a) The Commission and Member shall determine an Annual Quantity of Water estimated to be required by the Member in accordance with Schedule C.
- (b) The Member shall be entitled to the Annual Quantity determined and the Commission shall undertake to provide the Water within the System to supply the Annual Quantity. In fulfilling this obligation, the Commission shall use Best Efforts to:
  - (i) make Water available to the Member each year as required by the Member to a maximum amount equal to the Annual Quantity for that year;
  - (ii) subject to clause (c) following, make Water available to the Member each day as required by the Member up to a maximum amount equal to the Maximum Daily Quantity for that day;
  - (iii) deliver Water to the Points of Delivery at all times during each year at a pressure equal to at least the Minimum Pressure for that year, and for the majority of the time during such year at a pressure falling within the Normal Pressure Range for that year; and
  - (iv) avoid situations where it is unable to supply to the Member the quantity of Water required by the Member.

- (c) The Member and the Commission shall work cooperatively and each of them shall use Best Efforts to manage and control the peak hour rates of draw so as to optimize the operation of the System while providing Water to the Member under this Agreement.
- (d) Provided there is sufficient quantity of Water available from the System and provided the Commission's ability to meet its obligations to other Members and customers is not jeopardized, the Commission shall use Best Efforts to provide additional quantities of Water above the Annual Quantity if required by the Member.
- (e) Where the availability of raw water or the capacity of the System is insufficient to deliver the Annual Quantity, the Members shall be allocated a proportion of the total available System volume based on a ratio of the Member's previous year's actual volume to the total previous year volume of all Members and customers, until such time as the Commission is able to fully supply the volume required.

## **5.** Purchase of Water and Determination of Rates

- (a) The Member shall purchase and pay for all Water measured by the Commission at the Points of Delivery.
- (b) The Member shall purchase and pay for all Water at the Rate established by the Commission and in effect from time to time in accordance with the attached Schedule "E".
- (c) The Member shall pay for Water by way of monthly payments based upon billings prepared by the Commission. The Commission shall provide to the Member monthly billings setting out the actual volume of Water purchased from the Commission, the applicable Rate and amount payable to the Commission at least thirty (30) days in advance of the due date for payment. If the Member fails to pay by the due date, then the Member must pay the late payment charge specified in the monthly billing.
- (d) Notwithstanding paragraph 5(a), should the actual volume of water delivered to the Member by the Commission for a calendar year be less than 90% of the Annual Quantity for that year, the amount that the Member payable to the Commission under paragraph 5(b) shall be 90% of the Annual Quantity times the Rate, with such adjustment to be made on the final monthly billing issued under paragraph 5(d).
- (e) Annually, by October 31<sup>st</sup>, the Commission shall forward to the Member, the rate to be charged for water supplied by the Commission under this Agreement to become effective on January 1<sup>st</sup> of the following year.
- (f) The rate to be charged shall be calculated in accordance with the provisions of Schedule "E" of this Agreement.
- (g) The Member shall provide the Commission with such information as the Commission may reasonably request from time to time in respect of the Member's actual consumption of water.

#### **6.** Repairs, Maintenance and Replacements

- (a) The Commission may interrupt or curtail Water service for period of time as it may reasonably require for the purpose of effecting any repairs, maintenance, replacement, upgrading or other work related to the System providing service under this Agreement provided that:
  - (i) the Commission has given the Member at least forty-eight (48) hours prior notice or, in the event of unforeseen circumstances, the Commission gives notice of such interruption or curtailment as soon as is reasonably possibly possible; and
  - (ii) the Commission acts reasonably in using Best Efforts to restore services as soon as reasonably possible.
- (b) The Commission shall use Best Efforts to coordinate the repairs, maintenance, replacement, upgrading and other work referred to in sub clause (a), above, with the Member so as to minimize to the extent reasonable the inconvenience to the Member of interruptions and curtailments.
- (c) During periods of interruption or curtailment provided for in sub clause (a), above, the Commission may reduce the level, quality or quantity of service provided to the Member under this Agreement, provided that the Commission shall treat all of its customers affected by the interruption or curtailment, including the Member, fairly, equitably, and without preference, consistent with any operating constraints then in effect. The Commission and the Member shall use Best Efforts to keep each other apprised of and up-to-date in respect of the relevant circumstances during each interruption or curtailment.

## **7.** General Terms

- (a) This Agreement may not be assigned without the prior written consent of the other party, which consent shall not be unreasonably withheld.
- (b) This Agreement is for the benefit of and binds the Commission and the Member and their respective successors and permitted assigns.
- (c) Any term of this Agreement which is determined to be void, unenforceable or illegal shall be severed from this Agreement. The remaining terms shall be effective and enforceable.
- (d) The headings are for reference only and shall not be used to interpret or construe this Agreement.
- (e) Time is of the essence for every part of this Agreement.
- (f) The Member and the Commission are individually responsible for obtaining, at their sole expense, all necessary consents, approvals or orders from any level of government, board, tribunal, or other regulatory authority which is or are required in order for each of them to enter into this Agreement or to perform and satisfy their respective obligations described herein. The Member and the Commission shall cooperate with each other and shall provide reasonable assistance to each other, when requested.

- (g) Any notice, consent or communication required by this Agreement must be in writing and shall be delivered by hand or by courier to the following addresses or shall be telecopied (faxed) to the following telecopier (fax) numbers, as the case may be:
  - (i) To the Commission:

Shirley McClellan Regional Water Services Commission

Attention: Commission Manager

Office Address: PO Box 1270

Stettler, AB ToC 2L0

Telecopier (Fax) No.: 403-742-1277

(ii) To the [Member]:

Attention: Chief Administrative Officer

Telecopier (Fax) No:

- (h) This Agreement shall be governed by and construed according to the laws in force in the Province of Alberta and Bylaws of the Commission.
- (i) All changes of gender and number shall be made where required.
- (j) The term of this Agreement is Thirty (30) years commencing from the Effective Date. This Agreement may only be renewed by further written agreement between the parties.
- (k) This Agreement is the only agreement between the parties in relation to the subject matter hereof, and supercedes and replaces all prior agreements, representations, warranties, statements, promises, information, arrangements and understandings, whether oral or written, express or implied, with respect to the subject matter hereof. This Agreement may only be amended or modified by a further written agreement of the parties.

## **8.** Force Majeure

- (a) The Commission shall not be liable for any failure of or delay in performance of its obligations hereunder or be deemed to be in breach of this Agreement if such failure or delay arise from "force majeure".
- (b) For the purposes of this Agreement, "force majeure" shall mean any cause not reasonably within the Commission's control and shall include, without limitation, acts of God, strikes, lockouts or other industrial disturbances, acts of public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, storms, floods, high waters, washouts, inclement weather, orders or acts of evil or military authorities, civil disturbances, or any other causes, whether of the kind herein enumerated or otherwise, not within the reasonable control of the Commission and

- which, by the exercise of due diligence, the Commission is unable to overcome, provided that lack of funds shall not be a cause beyond control.
- (c) The Commission shall give the Member prompt notice of such circumstances and shall take all reasonable steps to remove such disability. The Commission shall not be entitled to the benefit of this force majeure clause to the extent the failure to provide Water was caused by the Commission having failed to remedy the force majeure condition where it was reasonably able to do so and to resume the supply of water with reasonable dispatch.
- (d) The Commission may impose reasonable restrictions on the delivery of Water, provided that the Commission shall treat all of its customers affected by the force majeure, including the Member, fairly, equitably and without preference, consistent with any operating constraints then in effect.
- (e) The parties agree that the settlement of strikes, lockouts, and other industrial disturbances shall be entirely within the discretion of the particular party involved therein and such party may make settlement thereof in such time and on such terms and conditions as it may deem to be advisable and no delay in making such settlement shall deprive such party of the benefits of this section.
- (f) A force majeure event shall merely suspend contractual obligations, and not bring this Agreement or any portion thereof to an end.

## **9.** Liability, Damages and Mutual Indemnity

- (a) Unless the cause is proven to be due directly to the negligence of the Commission, its employee's or agents, the Commission shall have no liability to the Member whatsoever for any damage, loss, cost or expense resulting from, arising out of or associated with:
  - (i) a break of any Watermain, service pipe or collapse of any ditch or trench.
  - (ii) the interference or suspension of the supply of Water due to maintenance work to, repair work to or replacement work for the Commission's water system or an emergency situation regarding any part of the Commission's water system, and
- (b) any accident to or failure of any part of the Commission's water system;
- (c) Notwithstanding any other provision of this Agreement, neither the Member nor the Commission shall be liable to the other for:
  - (i) any losses or costs arising from third party claims or causes of action, including claims or causes of action of the other's customers; or
  - (ii) any indirect, consequential or punitive damages, including loss of profits or revenues or other similar damages.
- (d) Each party (the "indemnifying party") agrees to indemnify and save harmless the other party (the "indemnified party"), its agents and employees from and against any and all

damage, injury, loss, costs, causes of action, including legal costs on solicitor and own client basis, and claims suffered or incurred by the indemnified party, its agents or employees which are in any way connected with the performance or nonperformance of this Agreement and which are caused either directly or indirectly or contributed to in whole or in part by any act or failure to act of the indemnifying party, its agents and employees, in respect of which indemnifying party, its agents or employees is liable or otherwise responsible in law, provided that such indemnity shall be limited to an amount in proportion to which the indemnifying party, its agents and employees are at fault or otherwise held responsible in law.

#### **10.** Arbitration and Remedies

- (a) If a dispute arises between the Member and the Commission regarding the interpretation, application, operation or breach of this Agreement or any part of it the dispute must be submitted to the dispute resolution process described in the attached Schedule "F" before either party may take any other action or step or pursue any available remedy in relation to the dispute regardless of whether such action, steps or remedy involves the courts, the Alberta Utilities Commission or any successor tribunal or entity, provided however that either party may file a complaint or other document required to be filed with the courts, Board or any successor tribunal or entity and take any other action or step prior to submitting any dispute to the dispute resolution process if such filing, action or step is necessary to preserve its right to pursue the dispute in the event that the dispute resolution process is unsuccessful in resolving the dispute.
- (b) Notwithstanding that the dispute resolution process is involved, the parties shall continue to perform their obligations described in this Agreement until such time as the dispute resolution process is complete.
- Subject to Sub-clause (a), above, if a party breaches this Agreement, then the other party shall have all available legal, equitable and other remedies.

In witness whereof the parties have signed this Agreement to be effective from and after the Effective Date notwithstanding the actual date(s) of execution.

Shirley McClellan Reg	ional Water Services	Commission
Per:		
Per:		
Per:		_
Per·		

SCHEDULE "A"

The Member's Boundaries

In the case of an urban municipality the Member's Boundaries for the purposes of this Agreement shall be the established corporate boundaries of the Member as may be adjusted from time to time. In the case of a rural municipality a description or map of the service area will be included.

SCI	H	F)	DI	[ ]]	ĿE	"	R"
<b>L)</b>					11.		

Points of Delivery and Meter Chambers

Map and Diagrams of Points of Delivery and Meter Chamber Locations to be included

#### SCHEDULE "C"

### PART I - Annual Quantity

- 1. The Annual Quantity of Water for a calendar year shall be determined or re-determined, as the case may be, as follows:
  - (a) Prior to October 31st in each year of this Agreement, the Member shall provide to the Commission:
    - (i) a request for water for the next calendar year which the Member proposes as the Annual Quantity of Water, together with a forecast of volumes anticipated to be required for the second through fifth ensuing calendar years (the "forecast"); and
    - (ii) engineering and other information supporting the forecast, including without restriction information regarding the Member's forecast population, business and industrial growth.
  - (b) If the Commission does not agree that the quantity requested by the Member as the Annual Quantity of Water or any other forecasted volumes are reasonable, the Member and the Commission shall work together in good faith to reach agreement on the Annual Quantity of Water or other forecasted volumes.
- 2. For greater certainty, each of the Commission and the Member shall act reasonably in preparing and reviewing each forecast, and in all discussions and negotiations in relation to each forecast and the establishment of an Annual Quality of Water. The Member shall use best efforts in the preparation of each forecast to ensure to the extent reasonably possible that it is not over-estimating or otherwise inflating its Water needs. The Commission shall exercise sound engineering judgement and, where appropriate, consult with the Member when reviewing the technical aspects of the Member's forecast.

### PART 2 - Maximum Daily Quantity

The Maximum Daily Quantity for each day shall be equal to the quantity (expressed in M³) determined as follows:

Maximum Daily Quantity = \_\_\_\_AQ / 365

Where AQ equals the Annual Quantity for the calendar year in which that day falls.

SCHEDULE "D"

Delivery Pressures

To be determined when technical aspects of pipeline operation are known.

#### SCHEDULE "E"

Calculation of Rate and Minimum Payment

#### 1. Determination of Rate

The rate to the Member shall be a rate common to all Members and shall be calculated by dividing the estimated annual costs of the System by the total volume of water requested by the Members.

The estimated annual costs of the System shall be calculated on a cost of service basis utilizing the principles set out in the American Water Works Association (AWWA) manuals of practice dealing with water rates and charges, as revised and updated from time to time, and in accordance with the findings and directives of the Alberta Utilities and may include:

- (i) operations of the Board and Manager;
- (ii) operations of the System including those costs related to the operation of the raw water supply facilities, treatment plant, transmission pipeline system and meter chambers;
- (iii) purchase of water from an outside source, if any;
- (iv) repayment of debt obligations;
- (v) non cash expenditures; and
- (vi) return on equity and investments;
- (vii) allocations for present of future capital expenditures
- (viii) prior year's or years' operating deficit

Principles and practices to be applied to determine Rates may be changed from time to time by way of negotiated agreement between the Members or as a result of a decision or order of the Alberta Utilities Commission, or a successor tribunal or authority.

### 2. Interim Calculation of Rate

Notwithstanding Clause 1 of this Schedule, until such time as all of the Members are drawing water substantially from the System the following cost sharing and recovery approach shall be used:

- i. Governance and Administration Costs will be shared equally among the 16 Members and will be paid by the Member directly to the Commission.
- ii. Debenture Debt Repayment Costs and Contributions to Capital Reserves will be shared among the Members on a basis proportionate to the allocation of System Capacity set out Section 10.1 of Commission Bylaw 2, such proportionate amount to be paid by the Member directly to the Commission.

iii. System Operations Costs including the costs of purchasing treated water, the costs associated with operation and maintenance of the transmission system and Water Transfer Station and any transfers to operating reserves, will be recovered through uniform rates levied on actual volume of water delivered, subject to such minimum annual payments as provided in Section 3 of this Schedule.

### 3. Minimum Payment to the Commission

Under this agreement the Member shall pay to the Commission the product of the actual volume of water purchased by the Member in a year times the rate set out by the Commission. Notwithstanding this, where the actual volume of water purchased is less than 90% of the Annual Quantity, the Member shall be responsible for a minimum payment to the Commission of 90% of the Annual Quantity times the rate set by the Commission.

#### SCHEDULE "F"

### Dispute Resolution Process

The Member and the Commission acknowledge that in any business relationship a difference of opinion or interpretation or a divergence of interest may arise. The Member and the Commission are committed to resolving any disputes in a non-adversarial, informal, and cost efficient manner. Therefore the Member and the Commission agree as follows:

- 1. The Member and the Commission shall attempt to resolve any dispute through direct negotiation.
- 2. Failing successful negotiation they shall resort to mediation as follows:
  - (a) Either party may by written notice to the other, request that the parties select a mediator. The parties shall endeavor to select a mediator agreeable to both form a list of suitable mediators maintained by the Alberta Arbitration and Mediation Society.
  - (b) Within 7 days of the Mediator's selection, the Mediator shall designate a time for a meeting among the Mediator and a representative of each of the Member and the Commission. Each representative must have authority to agree to a resolution of the dispute.
  - (c) Subject to paragraph 10(b) of the Agreement, for a 45 day period of time from the written notice requesting the selection of a mediator, neither the Member nor the Commission shall take any action or step or pursue any available remedy other than to use its Best Efforts to participate in the mediation process.
  - (d) The cost and expense of the Mediator and the mediation process shall be paid for equally by the Member and the Commission.
  - (e) The mediation process, including all discussions, proposals and written materials made or prepared, shall be strictly confidential and cannot be used or referred to in any subsequent action, step or proceedings.
  - (f) The Mediator cannot be called by either party as a witness in any subsequent action, step or proceeding.
    - 3. Notwithstanding Clause 2 (c), either party may take such legal or regulatory action as may be necessary to preserve the right to any legal or regulatory remedy should a resolution of the dispute under the process in Section 2 of this Schedule be unsuccessful.

### **Appendix D Detailed Population and Water Volumes**

# Shirley McClellan Regional Water System Projected Population by Member 2007 - 2032

	Annual			Popu	lation				
	Growth %		2007	2013	2021	2032			
Urban Municipalities									
Town of Castor	3.0%		1,022	1,220	1,545	2,139			
<b>Town of Coronation</b>	3.0%		1,174	1,401	1,775	2,457			
Village of Bawlf	3.5%		402	494	650	949			
Village of Big Valley	3.0%		372	444	562	778			
Village of Consort	3.0%		693	827	1,048	1,451			
Village of Donalda	3.0%		251	300	380	526			
Village of Halkirk	3.0%		128	153	193	268			
Village of Rosalind	3.5%		225	276	364	531			
Village of Veteran	3.0%		319	381	483	668			
SV of Rochon Sands	3.0%		275	329	417	577			
SV of White Sands	6.0%		127	180	288	546			
			4,987	6,005	7,704	10,889			
Rural Municipalities									
Lacombe County									
Total Lac Cnty			<del>-</del>	-	-	-			
Total Lac City									
Camrose County									
Hamlets									
Meeting Creek	2.0%		39	44	51	64			
Pelican Point	18.0%		45	121	455	2,810			
Tillicum Beach	2.0%		136	153	179	223			
Kelsey	2.0%		31	34	40	50			
Total Hamlet			250	352	726	3,146			
Rural	2.0%		1,576	1,775	2,079	2,585			
<b>Total Cmrs Cnty</b>			1,826	2,127	2,805	5,732			
Paintearth County									
Hamlets									
Fleet	3.0%		27	33	41	57			
Brownfield	3.0%		33	39	50	69			
Total Hamlet			60	72	91	126			
Rural	3.0%		1,823	2,176	2,757	3,816			
Total Pnrth Cnty			1,883	2,248	2,848	3,942			

# Shirley McClellan Regional Water System Projected Population by Member 2007 - 2032

	Annual		Popul	ation	
	Growth %	2007	2013	2021	2032
Stettler County					
Hamlets					
Nevis	3.0%	33	39	50	69
Erskine	3.0%	385	459	582	805
Red Willow	3.0%	38	46	58	80
Total Hamlets		456	544	689	954
Rural	3.0%				
Buffalo Lake		3,874	4,626	5,860	8,111
North		1,895	2,262	2,866	3,967
East		1,485	1,773	2,246	3,109
South		1,179	1,408	1,783	2,468
Total Rural		8,432	10,068	12,754	17,655
Total Sttlr Cnty		8,888	10,612	13,444	18,609
Special Areas 2, 3 and 4					
Hamlets					
Loyalist	3.0%	5	7	8	11
Monitor	3.0%	74	89	112	156
Kirriemuir	3.0%	31	37	46	64
Altario	3.0%	22	26	33	46
Compeer	3.0%	22	26	33	46
Total Hamlets		154	184	233	323
Rural	3.0%	1,823	2,176	2,757	3,816
Total Spec Areas		1,977	2,360	2,990	4,139
Total Projected Populati	ion	19,560	23,352	29,791	43,311

## Shirley McClellan Regional Water System Projected Average Daily Treated Water Demands (m3) 2007 - 2032

	ADWD									
	Litres / capita / day	2007	2013	2021	2032					
Urban Municipalities										
Town of Castor	375	383	457	580	802					
Town of Coronation	375	440	525	666	921					
Village of Bawlf	320	129	158	208	304					
Village of Big Valley	375	139	166	211	292					
Village of Consort	375	260	310	393	544					
Village of Donalda	375	94	113	143	197					
Village of Halkirk	375	48	57	73	100					
Village of Rosalind	320	72	88	116	170					
Village of Veteran	375	120	143	181	251					
SV of Rochon Sands	375	103	123	156	216					
SV of White Sands	375	48	68	108	205					
		1,836	2,209	2,833	4,002					
Rural Municipalities										
Lacombe County										
Future Use	3.7%	110	137	183	274					
Total County		110	137	183	274					
<u>Camrose County</u> Hamlets										
Meeting Creek	400	16	17	20	25					
Pelican Point	400	18	48	182	1,124					
Tillicum Beach	400	54	61	72	89					
Kelsey	400	12	14	16	20					
Total Hamlet		100	141	290	1,259					
Rural	175	276	311	364	452					
Total Cmrs Cnty		376	451	654	1,711					
Paintearth County										
Hamlets										
Fleet	375	10	12	15	21					
Brownfield	375	12	15	19	26					
Total Hamlet		23	27	34	47					
Rural	350	638	762	965	1,336					
Total Pnrth Cnty		660	789	999	1,383					

## Shirley McClellan Regional Water System Projected Average Daily Treated Water Demands (m3) 2007 - 2032

	ADWD				
	Litres / capita / day	2007	2013	2021	2032
Stettler County					
Hamlets					
Nevis	375	12	15	19	26
Erskine	375	144	172	218	302
Red Willow	350	13	16	20	28
Total Hamlets		170	203	257	356
Rural					
Buffalo Lake	230	892	1,065	1,349	1,868
North	330	625	747	946	1,309
East	350	520	621	786	1,088
South	175	206	246	312	432
Total Rural		2,243	2,678	3,393	4,697
Total Sttlr Cnty		2,413	2,881	3,650	5,052
Special Areas 2, 3 and 4					
Hamlets					
Loyalist	375	2	2	3	4
Monitor	375	28	33	42	58
Kirriemuir	375	11	14	17	24
Altario	375	8	10	12	17
Compeer	375	8	10	12	17
Total Hamlets		58	69	87	121
Rural	350	638	762	965	1,336
Total Spec Areas		696	831	1,052	1,457
Total Projected Populati	on	6,091	7,298	9,372	13,879
Total Trojected Fopulati	0.1	5,051	,,230	3,312	10,013

## Shirley McClellan Regional Water System Annual Treated Water Volume (m3) Based on Average Daily Consumption 2007 - 2032

	2007	2013	2021	2032
Urban Municipalities				
Town of Castor	139,845	166,982	211,528	292,805
Town of Coronation	160,635	191,807	242,975	336,334
Village of Bawlf	46,905	57,658	75,924	110,847
Village of Big Valley	50,853	60,721	76,919	106,474
Village of Consort	94,825	113,227	143,432	198,544
Village of Donalda	34,400	41,076	52,034	72,027
Village of Halkirk	17,499	20,895	26,469	36,640
Village of Rosalind	26,233	32,247	42,463	61,994
Village of Veteran	43,674	52,149	66,060	91,443
SV of Rochon Sands	37,691	45,005	57,011	78,916
SV of White Sands	17,411	24,697	39,363	74,724
	669,970	806,462	1,034,179	1,460,747
Rural Municipalities				
Lacombe County				
Future Use	40,150	49,982	66,933	100,009
Total County	40,150	49,982	66,933	100,009
Camrose County Hamlets				
Meeting Creek	5,659	6,373	7,467	9,284
Pelican Point	6,547	17,673	66,430	410,269
Tillicum Beach	19,806	22,305	26,134	32,494
Kelsey	4,468	5,031	5,895	7,330
Total Hamlet	36,480	51,382	105,926	459,377
Rural	100,661	113,360	132,820	165,144
Total Cmrs Cnty	137,140	164,743	238,746	624,521
Paintearth County Hamlets				
Fleet	3,739	4,465	5,656	7,829
Brownfield	4,487	5,358	6,787	9,395
Total Hamlet	8,226	9,822	12,443	17,224
Rural	232,846	278,030	352,200	487,528
Total Pnrth Cnty	241,072	287,853	364,643	504,751
Stettler County Hamlets				
Nevis	4,487	5,358	6,787	9,395
Erskine	52,648	62,864	79,634	110,232
-	. ,	,	- /	-,

### Appendix D - Table D3 Shirley McClellan Regional Water System

### Annual Treated Water Volume (m3) Based on Average Daily Consumption 2007 - 2032

	2007	2013	2021	2032
Red Willow	4,886	5,834	7,390	10,230
Total Hamlets	62,020	74,056	93,811	129,857
Rural				
Buffalo Lake	325,562	388,737	492,441	681,654
North	228,215	272,500	345,195	477,831
East	189,676	226,483	286,902	397,140
South	75,298	89,910	113,895	157,657
Total Rural	818,751	977,631	1,238,434	1,714,282
Total Sttlr Cnty	880,771	1,051,687	1,332,245	1,844,139
Special Areas 2, 3 and 4				
Hamlets				
Loyalist	748	893	1,131	1,566
Monitor	10,171	12,144	15,384	21,295
Kirriemuir	4,188	5,001	6,335	8,768
Altario	2,991	3,572	4,525	6,263
Compeer	2,991	3,572	4,525	6,263
Total Hamlets	21,089	25,181	31,899	44,156
Rural	232,846	278,030	352,200	487,528
Total Spec Areas	253,935	303,212	384,099	531,683
Total Project Annual Vol	2,223,039	2,663,937	3,420,846	5,065,851

### Appendix D - Table D4 Shirley McClellan Regional Water System Allocation of 2032 Maximum Day Demand Among Lines

	Peak Day				Main Line			
	Demand	Transfer Station	Castor	Coronation	Veteran	Loyalist	Consort	Brownfield
	(m3)	Castor	Coronation	Veteran	Loyalist	Consort	Compeer	Branch
<b>Urban Municipalities</b>								
Town of Castor	2,006	2,006						
Town of Coronation	2,304	2,304	2,304					
Village of Bawlf	759							
Village of Big Valley	729							
Village of Consort	1,360	1,360	1,360	1,360	1,360	1,360		
Village of Donalda	493							
Village of Halkirk	251	251						
Village of Rosalind	425	425						
Village of Veteran	626	626	626	626				
SV of Rochon Sands	541							
SV of White Sands	512							
Rural Municipalities								
Camrose County								
Hamlets								
Meeting Creek	64							
Pelican Point	2,810							
Tillicum Beach	223							
Kelsey	50							
Rural	905							
Lacombe County								
Future Use	548							
Paintearth County								
Hamlets								
Fleet	54	54						
Brownfield	64	64	64					64
Rural Volume	2,671	2,671	1,782	1,248				534
% Allocation	_,	100%	67%	47%				20%
/0 / III O C C C I O I I		10070	3770	4770				2070

	Peak Day	Main Line						
	Demand	Transfer Station	Castor	Coronation	Veteran	Loyalist	Consort	Brownfield
	(m3)	Castor	Coronation	Veteran	Loyalist	Consort	Compeer	Branch
Stettler County			'		•	<u>'</u>	•	
Hamlets								
* Nevis	64							
** Erskine	755							
Red Willow	70							
Rural								
Buffalo Lake	3,735							
North	2,618							
East	2,176	2,176						
South	864							
Special Areas 2, 3 and 4								
Hamlets								
Loyalist	11	11	11	11	11			
Monitor	146	146	146	146	146	146	146	
Kirriemuir	60	60	60	60	60	60	60	
Altario	43	43	43	43	43	43	43	
Compeer	43	43	43	43	43	43	43	
Rural	2,671	2,671	2,671	2,671	2,671	2,671	1,336	
% Allocation		100%	100%			100%	50%	
Total	30,650	14,909	9,109	6,208	4,334	4,322	1,627	599
Urban	11,651	7,391	4,657	2,289	1,662	1,652	292	64
Rural	16,189	7,519	4,453	3,919	2,671	2,671	1,336	534
Total	27,840	14,910	9,110	6,208	4,334	4,323	1,627	599

### Appendix D - Table D4 Shirley McClellan Regional Water System Allocation of 2032 Maximum Day Demand Among Lines

	North Line							Branches	
	Transfer Station	North Shore	Donalda	Rosalind	Meeting	Tillicum	Big Valley	Buffalo Lake	
	Donalda	Branch	Rosalind	Bawlf	Creek Branch		Branch	Branch	
	Donaida	Brancn	KOSallilu	DdWII	Creek Branch	Branch	Branch	Branch	
Linhan Municipalities									
Urban Municipalities									
Town of Castor									
Town of Coronation									
Village of Bawlf	759		759	759					
Village of Big Valley							729		
Village of Consort									
Village of Donalda	493								
Village of Halkirk									
Village of Rosalind	425		425						
Village of Veteran									
SV of Rochon Sands								541	
SV of White Sands								512	
3V of White Salids								312	
Rural Municipalities									
Camrose County									
Hamlets									
Meeting Creek	64	64			64	64			
Pelican Point	2,810	2,810			0.	0.			
Tillicum Beach	223	2,010	223			223			
	50		50			223			
Kelsey		204		450		262			
Rural	905	281	624	452	90	362			
	100%	31%	69%	50%	10%	40%			

### Lacombe County

Future Use

### Paintearth County

Hamlets

Fleet

Brownfield

Rural Volume

% Allocation

			North	n Line			Bran	Branches	
	Transfer Station	North Shore	Donalda	Rosalind	Meeting	Tillicum	Big Valley	Buffalo Lake	
	Donalda	Branch	Rosalind	Bawlf	Creek Branch	Branch	Branch	Branch	
Stettler County									
Hamlets									
* Nevis									
** Erskine									
Red Willow	70								
Rural									
Buffalo Lake								3,735	
North	2,618								
East									
South							864		
Special Areas 2, 3 and 4									
Hamlets									
Loyalist									
Monitor									
Kirriemuir									
Altario									
Compeer									
Rural									
% Allocation									
Total	8,417	3,155	2,081	1,212	154	648	1,593	4,787	
Urban	4,894	2,874	1,457	759	64	286	729	1,052	
Rural	3,523	281	624	452	90	362	864	3,735	
Total	8,417	3,155	2,081	1,212	154	648	1,593	4,787	

# Appendix E East Central Regional Water Authorization Act, SA 2007 c. E-0.2

#### **Preamble**

WHEREAS communities and residents within the County of Stettler No. 6, Lacombe County, County of Camrose No. 22, County of Paintearth No. 18 and Special Area No. 4 are experiencing problems with the quantity and quality of water from their individual existing potable water supplies;

WHEREAS supplying water from the South Saskatchewan River Basin to those communities and residents would provide reliable treated municipal water to those communities and residents, but the piping and discharge of treated water would result in a transfer of water to the North Saskatchewan River Basin;

WHEREAS the Stettler Regional Water Authorization Act, SA 2005 cS-19.5, and the Town of Bashaw and Village of Ferintosh Water Authorization Act, SA 2007 cT-5.7, authorized licences for an interbasin transfer of treated municipal water to some but not all of those communities and residents;

WHEREAS section 47 of the *Water Act* provides that a special Act of the Legislature is required to authorize the issuance of licences to transfer water between major river basins; and

WHEREAS the Minister of Environment has complied with section 48 of the Water Act;

THEREFORE HER MAJESTY, by and with the advice and consent of the Legislative Assembly of Alberta, enacts as follows:

#### **Authorization**

1 For the purposes of this Act, licences and amendments to licences pursuant to the *Water Act* are authorized to be issued for the transfer of treated municipal water between the South Saskatchewan River Basin and the North Saskatchewan River Basin, in an amount not to exceed 10 800 cubic decametres annually.

#### Repeal of existing Acts

**2** The Stettler Regional Water Authorization Act, SA 2005 cS-19.5, and the Town of Bashaw and Village of Ferintosh Water Authorization Act, SA 2007 cT-5.7, are repealed.

### Appendix F Detailed Costs and Funding for Completed Capital Projects

# Appendix F - Table F-1 Shirley McClellan Regional Water System Detailed Capital Expenditures and Financing Constructed Facilities

		Allo	cation
	Actual	Transfer Station	Main Transmission Line
ase 1 - Transfer Station and Main Transmission Line to Con	sort		
Capital Expenditures		25.1%	74.9%
General Project			
Project Management	\$244,614	\$61,441	\$183,173
Engineering	\$5,965,201	\$1,498,311	\$4,466,890
Interbasin Transfer Study	\$39,998	\$39,998	
Water System Valuation	\$13,417	\$13,417	
Survey	\$42,446	\$4,245	\$38,20
Testing and Commissioning	\$556,911	\$139,882	\$417,029
Legal	\$6,847	\$1,720	\$5,127
Land Agent and Assembly	\$251,857	\$63,260	\$188,596
Utility Line Locates	\$136,278	\$13,628	\$122,650
Construction Completion and Cleanup	\$338,678	\$33,868	\$304,813
Interim Financing	\$266,132	\$66,846	\$199,286
	\$7,862,379	\$1,936,615	\$5,925,76
Water Transfer Station and Reservoir Facility			
Land Acquisition and Compensation	\$117,899		
Building, Reservoir and Equipment	\$8,849,941		
Sub-total Transfer Station	\$8,967,841	\$8,967,841	
Main Transmission Pipeline - Water Transfer Station to Consort			
Land Acquisition and Compensation	\$563,040		
Pipeline Construction	7303,040		
Stettler to Gadsby	\$6,785,185		
Gadsby to Castor	\$5,476,736		
Castor to Coronation	\$5,757,149		
Coronation to Veteran	\$3,737,149		
Veteran to Consort	\$3,709,380		
Sub-total construction costs	\$25,646,169		
Other Facilities and Costs			
Loyalist Truck Fill	\$2,625		
Equipment Purchases - Castor	\$2,625 \$162,092		
Equipment Purchases - Consort	\$318,140		
Equipment Purchases - Consort  Equipment Purchases - Veteran	\$318,140 \$43,615		
	\$26,735,680		\$26,735,680
Sub-total Transmission Pipeline	320,733,000		1 -// -

# Appendix F - Table F-1 Shirley McClellan Regional Water System Detailed Capital Expenditures and Financing Constructed Facilities

		Allo	cation
	Actual	Transfer Station	Main Transmission Line
<u>Funding</u>			<u> </u>
Water for Life			
Eligible Costs	\$42,755,507	\$10,904,456	\$31,851,051
Transmission Funding Rate	90%	90%	90%
Funding under Program	\$38,479,956	\$9,814,010	\$28,665,946
Grant	\$38,072,621		
Interest on Advanced Grant Funds	\$407,335	\$103,888	\$303,447
	\$38,479,956	\$9,814,010	\$28,665,946
Commission Funding	\$5,085,943	\$1,090,446	\$3,995,497
	\$43,565,899	\$10,904,456	\$32,661,444

### Appendix F - Table F-2 Shirley McClellan Regional Water System **Detailed Capital Expenditures and Financing Constructed Facilities**

	Project Budget	Actual 2012	Projected 2013 To Complete	Projected Final
Phase 2 - Big Valley Branch				
Capital Expenditures				
Construction		\$1,276,345		\$1,276,345
Construction Holdbacks		\$141,816		\$141,816
Engineering		\$334,951		\$334,951
Geo-technical		\$51,666		\$51,666
Legal Fees		\$958		\$958
Loan Interest		\$2,204		\$2,204
Location Services		\$12,485		\$12,485
Project Manager		\$29,570		\$29,570
Total Cost	\$6,317,068	\$1,849,995	\$0	\$1,849,995
Funding				
Provincial Grant - Water for L	ife			
Eligible Costs	\$6,317,068	\$1,849,995	\$0	\$1,849,995
Grant Funding at	90%	90%	90%	Ψ <b>1</b> ,0 13,333
Total Grant	\$5,685,361	\$1,664,996	\$0	\$1,664,996
Commission Funding				
Interim Borrowing		\$185,000		\$185,000
Debenture Borrowing	\$631,707			\$0
Total Funding	\$6,317,068	\$1,849,995	\$0	\$1,849,995
Phase 3 - North Line - Water Tran	sfer Station to Donal	<u>lda</u>		ćo
<u>Capital Expenditures</u> Construction	sfer Station to Donal	<u>da</u>		\$0
Capital Expenditures  Construction  Construction Holdbacks	isfer Station to Donal			\$0
Capital Expenditures  Construction  Construction Holdbacks  Engineering	isfer Station to Donal	\$218,685		\$0 \$218,685
Capital Expenditures  Construction  Construction Holdbacks  Engineering  Geo-technical	isfer Station to Donal			\$0 \$218,685 \$27,534
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees	isfer Station to Donal	\$218,685 \$27,534		\$0 \$218,685 \$27,534 \$0
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest	isfer Station to Donal	\$218,685 \$27,534 \$248		\$0 \$218,685 \$27,534 \$0 \$248
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services	isfer Station to Donal	\$218,685 \$27,534		\$0 \$218,685 \$27,534 \$0 \$248 \$15,413
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest	\$8,748,947	\$218,685 \$27,534 \$248	\$0	\$0 \$218,685 \$27,534 \$0 \$248
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager		\$218,685 \$27,534 \$248 \$15,413	\$0	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager		\$218,685 \$27,534 \$248 \$15,413	\$0	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost	\$8,748,947	\$218,685 \$27,534 \$248 \$15,413	\$0	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost	\$8,748,947	\$218,685 \$27,534 \$248 \$15,413	<b>\$0</b>	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 \$261,879
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost  Funding Provincial Grant - Water for L	\$ <b>8,748,947</b>	\$218,685 \$27,534 \$248 \$15,413 \$261,879		\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 \$261,879
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost  Funding Provincial Grant - Water for L	\$ <b>8,748,947</b> ife \$8,748,947	\$218,685 \$27,534 \$248 \$15,413 \$261,879	\$0	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 <b>\$261,879</b>
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost  Funding Provincial Grant - Water for L Eligible Costs Grant Funding at	\$ <b>8,748,947</b> ife \$8,748,947 90%	\$218,685 \$27,534 \$248 \$15,413 \$261,879 \$0%	\$0 90%	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 <b>\$261,879</b>
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost  Funding Provincial Grant - Water for L Eligible Costs Grant Funding at Total Grant	\$ <b>8,748,947</b> ife \$8,748,947 90%	\$218,685 \$27,534 \$248 \$15,413 \$261,879 \$0%	\$0 90%	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 \$261,879
Capital Expenditures  Construction Construction Holdbacks Engineering Geo-technical Legal Fees Loan Interest Location Services Project Manager Total Cost  Funding Provincial Grant - Water for L Eligible Costs Grant Funding at Total Grant Commission Funding	\$ <b>8,748,947</b> ife \$8,748,947 90%	\$218,685 \$27,534 \$248 \$15,413 <b>\$261,879</b> \$261,879 90% \$235,691	\$0 90%	\$0 \$218,685 \$27,534 \$0 \$248 \$15,413 \$0 <b>\$261,879</b> \$261,879

### Appendix F - Table F-3

### Shirley McClellan Regional Water System Cost Estimates

### **Unit Costs**

	Pipe	V	alves
75 mm		\$75	\$2,500
100 mm		\$100	\$2,750
150 mm		\$150	\$3,200

### **Cost Estimate**

Line	e Segment	1 (m)	# of	150 mm P	ipe Size	Contengency	Total	100 mm P	ipe Size	Contengency
From	То	L (m)	Valves	Pipes	Valves	& Engineering	Total	Pipes	Valves	& Engineering
						30%				
Bashaw	Pelican Point	15,850	3	\$2,377,500	\$9,600	\$716,130	\$3,103,230	\$1,585,000	\$8,250	\$477,975
Donalda	Pelican Point	24,000	4	\$3,600,000	\$12,800	\$1,083,840	\$4,696,640	\$2,400,000	\$11,000	\$723,300
North Shore	Meeting Creek	12,000	3	\$1,800,000	\$9,600	\$542,880	\$2,352,480	\$1,200,000	\$8,250	\$362,475
Donalda	Rosalind	31,500	4	\$4,725,000	\$12,800	\$1,421,340	\$6,159,140	\$3,150,000	\$11,000	\$948,300
Rosalind	Bawlf	14,650	3	\$2,197,500	\$9,600	\$662,130	\$2,869,230	\$1,465,000	\$8,250	\$441,975
Ohaton	Bawlf	14,700	3	\$2,205,000	\$9,600	\$664,380	\$2,878,980	\$1,470,000	\$8,250	\$443,475
Coronation	Brownfield	26,000	3	\$3,900,000	\$9,600	\$1,172,880	\$5,082,480	\$2,600,000	\$8,250	\$782,475
Consort	Monitor	16,100	4	\$2,415,000	\$12,800	\$728,340	\$3,156,140	\$1,610,000	\$11,000	\$486,300
Monitor	Kirriemuir	24,900	3	\$3,735,000	\$9,600	\$1,123,380	\$4,867,980	\$2,490,000	\$8,250	\$749,475
Kirriemuir	Altario	11,450	3	\$1,717,500	\$9,600	\$518,130	\$2,245,230	\$1,145,000	\$8,250	\$345,975
Altario	Compeer	15,150	3	\$2,272,500	\$9,600	\$684,630	\$2,966,730	\$1,515,000	\$8,250	\$456,975

### Shirley

#### **Unit Costs**

	Pipe	V	alves
75 mm		\$75	\$2,500
100 mm		\$100	\$2,750
150 mm		\$150	\$3,200

### **Cost Estimate**

Line	e Segment	1 (m)	Total		75 mm P	ipe Size	Contengency	Total
From	То	L (m)	TOtal	Total		Valves	& Engineering	Total
Bashaw	Pelican Point	15,850	\$2,071,225		\$1,188,750	\$7,500	\$358,875	\$1,555,125
Donalda	Pelican Point	24,000	\$3,134,300		\$1,800,000	\$10,000	\$543,000	\$2,353,000
North Shore	Meeting Creek	12,000	\$1,570,725		\$900,000	\$7,500	\$272,250	\$1,179,750
Donalda	Rosalind	31,500	\$4,109,300		\$2,362,500	\$10,000	\$711,750	\$3,084,250
Rosalind	Bawlf	14,650	\$1,915,225		\$1,098,750	\$7,500	\$331,875	\$1,438,125
Ohaton	Bawlf	14,700	\$1,921,725		\$1,102,500	\$7,500	\$333,000	\$1,443,000
Coronation	Brownfield	26,000	\$3,390,725		\$1,950,000	\$7,500	\$587,250	\$2,544,750
Consort	Monitor	16,100	\$2,107,300		\$1,207,500	\$10,000	\$365,250	\$1,582,750
Monitor	Kirriemuir	24,900	\$3,247,725		\$1,867,500	\$7,500	\$562,500	\$2,437,500
Kirriemuir	Altario	11,450	\$1,499,225		\$858,750	\$7,500	\$259,875	\$1,126,125
Altario	Compeer	15,150	\$1,980,225		\$1,136,250	\$7,500	\$343,125	\$1,486,875

### Appendix G Actual and Short Term Projected Consumptions

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Town of Castor											
Design (Apndx D - Table 3)	157,397	162,119	166,982	171,992	177,152	182,466	187,940	193,578	199,386	205,367	211,528
Regional Supply	Connected										
Population - Actual / Projected	931	932	941	951	960	970	980	989	999	1,009	1,019
Actual Volume	119,321	112,555									
Actual LCD	351	331									
Requested / Projected Volume	134,064	120,866	118,000	121,456	122,671	123,897	125,136	126,388	127,652	128,928	130,217
Projected LCD *	339	355	343	350	350	350	350	350	350	350	350
Projected PopGrowth %**		0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Town of Coronation											
Design (Apndx D - Table 3)	180,796	186,220	191,807	197,561	203,488	209,592	215,880	222,356	229,027	235,898	242,975
Regional	Connected	100,220	131,007	137,301	200, .00	203,332	223,000	222,550		255,050	2 .2,373
Population - Actual / Projected	1,015	947	1,025	1,035	1,046	1,056	1,067	1,077	1,088	1,099	1,110
Actual Volume	114,967	116,715	1,023	2,000	2,0 .0	2,000	2,007	2,077	2,000	2,033	1,110
Actual LCD	310	338									
Requested / Projected Volume	126,000	113,000	113,000	117,156	118,327	119,511	120,706	121,913	123,132	124,363	125,607
Projected LCD *	261	327	302	310	310	310	310	310	310	310	310
Projected PopGrowth %**			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Village of Bawlf											
	F2 024	FF 700	F7.CF0	F0 676	C1 7C4	62.026	CC 1C2	CO 470	70.076	72.257	75.024
Design (Apndx D - Table 3)	53,824	55,708	57,658	59,676	61,764	63,926	66,163	68,479	70,876	73,357	75,924
Regional Supply	Service - 2020 374		411	419	428	436	445	454	463	472	482
Population	3/4	403	411	419	428	436	445	454	463		57,132
Projected Volume										56,012	•
LCD*			2.00/	2.00/	2.00/	2.00/	2.00/	2.00/	2.00/	325	325
Projected PopGrowth %**			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Village of Big Valley											
Design (Apndx D - Table 3)	57,235	58,952	60,721	62,543	64,419	66,351	68,342	70,392	72,504	74,679	76,919
Regional Supply	Service - Late	r 2013									
Population	351	364	366	368	369	371	373	375	377	379	381
Requested / Projected Volume		-	18,250	36,903	37,087	37,273	37,459	37,646	37,835	38,024	38,214
Projected LCD *		300	300	275	275	275	275	275	275	275	275
Projected PopGrowth %**			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
				•	•	•			•	•	
Village of Consort											
Design (Apndx D - Table 3)	106,727	109,929	113,227	116,623	120,122	123,726	127,438	131,261	135,198	139,254	143,432
Regional Supply	Connected	,-	,	-,-	-,	-,	,	, -	,	,	-, -
Population	739	722	746	754	761	769	777	784	792	800	808
Actual Volume	92,809	95,271									
Actual LCD	344	362									
Requested / Projected Volume	130,000	89,000	94,418	96,305	97,268	98,241	99,223	100,215	101,217	102,230	103,252
Projected LCD *	457	338	347	350	350	350	350	350	350	350	350
Projected PopGrowth %**			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Village of Donalda											
Design (Apndx D - Table 3)	38,718	39,880	41,076	42,308	43,577	44,885	46,231	47,618	49,047	50,518	52,034
Regional Supply	Service - April	,	,-	,	-,-	,	-, -	,	-,-	,-	,
Population	224	259	262	264	267	270	272	275	278	280	283
Requested / Projected Volume			-	23,506	31,655	31,971	32,291	32,614	32,940	33,270	33,602
Projected LCD *				325	325	325	325	325	325	325	325
Projected PopGrowth %**			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Village of Halkirk											
Design (Apndx D - Table 3)	19,696	20,287	20,895	21,522	22,168	22,833	23,518	24,223	24,950	25,698	26,469
Regional Supply	Connected										
Population	113	121	122	123	125	126	127	128	130	131	132
Actual	15,121	8,971									
Actual LCD	367	203									
Requested / Projected Volume	14,000	12,000	9,600	10,137	13,301	13,700	14,111	14,534	14,970	15,419	15,882
Projected LCD *	267	272	215	225	225	225	225	225	225	225	225
Projected PopGrowth %**			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Village of Rosalind											
Design (Apndx D - Table 3)	30,103	31,156	32,247	33,375	34,543	35,752	37,004	38,299	39,639	41,027	42,463
Regional Supply	Service - 2019										
Population	214	190	215	216	217	218	219	221	222	223	224
Requested / Projected Volume									26,288	26,419	26,551
Projected LCD *									325	325	325
Projected PopGrowth %**			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

### Shirley McClellan Regional Water System Actual and Projected Consumptions Years 2011 - 2021

% Connected

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
ACH CAC											
Village of Veteran	40.455	50.630	52.440	50.740	55.004	56.004	50.504	50.454	62.260	64.406	66.060
Design (Apndx D - Table 3)	49,155	50,630	52,149	53,713	55,324	56,984	58,694	60,454	62,268	64,136	66,060
Regional Supply	Connected	240	204	205	207	200	200	202	202	205	200
Population	293	249	294	296	297	299	300	302	303	305	306
Actual	23,159	23,484									
Actual LCD	217	258									
Requested / Projected Volume	25,200	24,500	25,000	25,384	25,511	25,638	25,767	25,896	26,025	26,155	26,286
Projected LCD *	236	270	233	235	235	235	235	235	235	235	235
Projected PopGrowth %**			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
SV of Rochon Sands	42.424	12.521	45.005	46.055	47.746	40.470	50.650	52.470	F0 700	55.350	F7.044
Design (Apndx D - Table 3)	42,421	43,694	45,005	46,355	47,746	49,178	50,653	52,173	53,738	55,350	57,011
Regional Supply	Service Availa	ble - 2016									
Requested / Projected Volume					-	1,311	4,052	5,565	5,732	7,380	7,601
Projected LCD *				200	200	200	200	200	200	200	200
Projected PopGrowth %**				3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
% Drawn (Seasonal use, units con	inected, bulk us	e)		0.0%	0.0%	5.0%	15.0%	20.0%	20.0%	25.0%	25.0%
SV of White Sands											
Design (Apndx D - Table 3)	21,980	23,299	24,697	26,179	27,750	29,415	31,180	33,050	35,033	37,135	39,363
Regional Supply	Service Availa	ble - 2016									
Population				127	131	135	139	143	147	152	156
Requested / Projected Volume				-	-	493	507	523	807	832	857
Projected LCD *				200	200	200	200	200	200	200	200
Projected PopGrowth %**				3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
% Drawn (Seasonal use, units con	inected, bulk us	e)		0.0%	0.0%	10.0%	10.0%	10.0%	15.0%	15.0%	15.0%
Camrose County											
Meeting Creek											
Design (Apndx D - Table 3)	6,125	6,248	6,373	6,500	6,630	6,763	6,898	7,036	7,177	7,320	7,467
Regional Supply	Timing of Con	nection - Not [	Determined								
Requested / Projected Volume											
Projected LCD *											
Projected PopGrowth %**											

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
			<u>'</u>		1	•	•	<u>'</u>	1	•	
Pelican Point  Design (Apndx D - Table 3)  Regional Supply	12,692 Service Avai	14,977 lable - 2018	17,673	20,854	24,608	29,037	34,264	40,432	47,709	56,297	66,430
Requested / Projected Volume Projected LCD *								3,032 200	5,964 200	8,445 200	11,625 200
Projected PopGrowth %** % Drawn (Seasonal use, units con	nnected, bulk ι	se)						18.0% 15.0%	18.0% 25.0%	18.0% 30.0%	18.0% 35.0%
Tillicum Beach  Design (Apndx D - Table 3)  Regional Supply  Requested / Projected Volume  Projected LCD *  Projected PopGrowth %**  % Drawn (Seasonal use, units con	-	21,868 Innection - Not	22,305 Determined	22,751	23,206	23,670	24,144	24,627	25,119	25,622	26,134
Kelsey											
Design (Apndx D - Table 3) Regional Supply Requested / Projected Volume Projected LCD * Projected PopGrowth %** % Connected	4,836 Timing of Co	4,933 Innection - Not	5,031 Determined	5,132	5,235	5,339	5,446	5,555	5,666	5,779	5,895
Rural Design (Apndx D - Table 3)	108,958	111,137	113,360	115,627	117,940	120,299	122,705	125,159	127,662	130,215	132,820
Regional Supply % Connected						2%	3%	5%	5%	7%	10%
Requested / Projected Volume						2,406	3,681	6,258	6,383	9,115	13,282
Total Camrose County						2,406	3,681	9,290	12,347	17,560	24,907
Lacombe County Design (Apndx D - Table 3)	46,462	48,190	49,982	51,840	53,767	55,766	57,840	59,990	62,221	64,534	66,933
Regional Supply % Connected			·		0%	0%	0%	0%	0%	0%	0%
Requested / Projected Volume					-	-	-	-	-	-	-

Appendix G

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Paintearth County											
<u>Fleet</u>											
Design (Apndx D - Table 3)	4,208	4,335	4,465	4,599	4,737	4,879	5,025	5,176	5,331	5,491	5,656
Regional Supply	Service Availa	ble									
Population	31	31	31	32	32	32	33	33	33	34	34
Requested / Projected Volume				-	-	590	596	1,203	1,215	1,227	1,240
Projected LCD *				200	200	200	200	200	200	200	200
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Connected				0%	0%	25%	25%	50%	50%	50%	50%
<u>Brownfield</u>											
Design (Apndx D - Table 3)	5,050	5,202	5,358	5,518	5,684	5,855	6,030	6,211	6,397	6,589	6,787
Regional Supply	Service - 2018	3									
Population	37	37	38	38	38	39	39	40	40	40	41
Requested / Projected Volume								1,444	1,458	1,473	1,488
Projected LCD *								200	200	200	200
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Connected								50%	50%	50%	50%
<u>Rural</u>											
Design (Apndx D - Table 3)	262,070	269,932	278,030	286,371	294,962	303,811	312,925	322,313	331,983	341,942	352,200
Regional Supply											
Actual	1,242	11,389									
Requested / Projected Volume											
Phase 1 - Halkirk North	-	8,500	-	-	-	-	-	-	-	-	-
Crowfoot Crossing	-	2,700	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290	3,290
Truck Fill / Other	264	510	510	510	510	510	510	510	510	510	510
	264	11,710	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800	3,800
Total Paintearth County	264	11,710	3,800	3,800	3,800	4,390	4,396	6,447	6,474	6,500	6,527

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Stettler County Nevis											
Design (Apndx D - Table 3) Regional Supply	5,050	5,202	5,358	5,518	5,684	5,855	6,030	6,211	6,397	6,589	6,787
Population	37	37	38	38	38	39	39	40	40	40	41
Requested / Projected Volume					-	-	-	-	1,458	1,473	1,488
Projected LCD *					200	200	200	200	200	200	200
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Connected					0%	0%	0%	0%	50%	50%	50%
Erskine											
Design (Apndx D - Table 3) Regional Supply	59,255	61,033	62,864	64,750	66,692	68,693	70,754	72,877	75,063	77,315	79,634
Population	433	437	442	446	450	455	460	464	469	473	478
Requested / Projected Volume				-	14,799	24,911	25,160	50,824	51,332	51,845	52,364
Projected LCD *				300	300	300	300	300	300	300	300
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Connected				0.0%	30.0%	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%
Red Willow											
Design (Apndx D - Table 3)	5,499	5,664	5,834	6,009	6,189	6,375	6,566	6,763	6,966	7,175	7,390
Regional Supply	Service Avail		3,834	0,009	0,183	0,373	0,500	0,703	0,300	7,173	7,330
Population	43	43	44	44	45	45	46	46	47	47	48
Requested / Projected Volume					-	1,651	1,668	1,685	1,701	1,718	3,471
Projected LCD *				200	200	200	200	200	200	200	200
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Connected				0.0%	0.0%	50.0%	50.0%	50.0%	50.0%	50.0%	100.0%
<u>Rural</u> Buffalo Lake											
Design (Apndx D - Table 3) Regional Supply	366,422 Service Avail	377,415 able - 2016	388,737	400,400	412,412	424,784	437,527	450,653	464,173	478,098	492,441
Number of Units		350	360	370	380	390	400	410	420	430	440
% Connected					0.0%	10.0%	10.0%	10.0%	15.0%	15.0%	15.0%
Number of Units Connected					-	39	40	41	63	65	66
Requested / Projected Volume					-	3,656	3,750	3,844	5,906	6,047	6,188

Appendix G

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
North Design (Apndx D - Table 3)	256,858	264,564	272,500	280,675	289,096	297,769	306,702	315,903	325,380	335,141	345,195
Regional Supply % Connected Requested / Projected Volume					3% 8,673	4% 11,911	5% 15,335	5% 15,795	6% 19,523	7% 23,460	8% 27,616
East Design (Apndx D - Table 3) Regional Supply	213,482	219,887	226,483	233,278	240,276	247,484	254,909	262,556	270,433	278,546	286,902
% Connected  Actual	2%	1%	1%	2%	3%	4%	5%	5%	6%	7%	8%
Requested / Projected Volume	5,000	2,500	2,500	4,666	7,208	9,899	12,745	13,128	16,226	19,498	22,952
South  Design (Apndx D - Table 3)  Regional Supply	84,749	87,291	89,910	92,607	95,385	98,247	101,194	104,230	107,357	110,578	113,895
% Connected Requested / Projected Volume			<mark>0%</mark> -	<mark>0%</mark> -	2% 1,908	4% 3,930	5% 5,060	5% 5,212	6% 6,441	<mark>7%</mark> 7,740	8% 9,112
<b>Total Stettler County</b>	5,000	2,500	2,500	4,666	32,588	55,959	63,718	90,486	102,588	111,782	123,189

Appendix G

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Special Areas 2, 3 and 4 Loyalist											
Design (Apndx D - Table 3)	842	867	893	920	947	976	1,005	1,035	1,066	1,098	1,131
Regional Supply Requested / Projected Volume Projected LCD * Projected PopGrowth %** % Connected	Service Avail	able					·	·			
Monitor											
Design (Apndx D - Table 3) Regional Supply	11,447 Service - 201	11,790 5	12,144	12,509	12,884	13,270	13,668	14,078	14,501	14,936	15,384
Population	84	84	85	86	87	88	89	90	91	91	92
Requested / Projected Volume					7,941	8,021	8,101	8,182	8,264	8,346	8,430
Projected LCD *					250	250	250	250	250	250	250
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Kirriemuir											
Design (Apndx D - Table 3) Regional Supply	4,713 Service - 202	4,855 2	5,001	5,151	5,305	5,464	5,628	5,797	5,971	6,150	6,335
Population Requested / Projected Volume Projected LCD *	34	35	35	35	36	36	37	37	37	38	38
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Altario											
Design (Apndx D - Table 3)	3,367	3,468	3,572	3,679	3,789	3,903	4,020	4,141	4,265	4,393	4,525
Regional Supply	Service - 202	2									
Population Requested / Projected Volume Projected LCD *	24	24	24	25	25	25	25	26	26	26	26
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Appendix G

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Compeer	2 267	2.460	2.572	2.670	2.700	2.002	4.020	4 4 4 4	4.265	4 202	4.525
Design (Apndx D - Table 3)	3,367	3,468	3,572	3,679	3,789	3,903	4,020	4,141	4,265	4,393	4,525
Regional Supply  Population	Time Undeter 25	minea 25	25	25	26	26	26	26	27	27	27
Requested / Projected Volume	25	25	25	25	26	20	26	20	21	27	21
Projected LCD *											
Projected PopGrowth %**		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
r rejected r ep ere man /e		2.070	1.070	2.075	2.070	2.070	2.070	1.070	1.070	1.070	2.070
<u>Rural</u>											
Design (Apndx D - Table 3)	262,070	269,932	278,030	286,371	294,962	303,811	312,925	322,313	331,983	341,942	352,200
Regional Supply											
Actual	2,049	3,292									
Requested / Projected Volume											
Truck Fill	1,340	2,500	1,000	1,340	1,340	1,340	1,340	1,340	1,340	1,340	1,340
Rural Customers	3,660	-	3,700	3,660	3,660	3,660	3,660	3,660	3,660	3,660	5,000
	5,000	2,500	4,700	5,000	5,000	5,000	5,000	5,000	5,000	5,000	6,340
			. =00			10.001	10.101	10.100		10010	
Total Special Areas	5,000	2,500	4,700	5,000	12,941	13,021	13,101	13,182	13,264	13,346	14,770
Actual Volume											
Total Urban Municipalities	365,377	356,996									
Total Rural Municipalities	3,291	14,681									
Total Actual Volume	368,668	371,677									
Requested / Projected											
Total Urban Municipalities	429,264	359,366	378,268	430,846	445,820	452,035	459,252	465,293	496,598	559,031	565,201
Total Rural Municipalities	10,264	16,710	11,000	13,466	49,329	75,775	84,896	119,406	134,672	149,188	169,394
	439,528	376,076	389,268	444,312	495,148	527,810	544,148	584,699	631,270	708,219	734,595

<sup>\*</sup> LCD = Litres per person per day

Requested Projected

<sup>\*\*</sup> Projected Population Growth Rate Revised from Appendix C - Table 1

### Appendix H Shirley McClellan Regional Water System Tangible Capital Assets

	Pipelines	Transfer Station	Land	Machinery Equipment	Total
Amorization Period in Years	75	45		5	
2010					
Opening Cost Value	\$31,784,173	\$10,113,271	\$117,899	\$165,508	\$42,180,851
Additions	\$407,904	\$342,847		\$247,760	\$998,511
Closing Cost Value	\$32,192,077	\$10,456,118	\$117,899	\$413,268	\$43,179,362
Opening Accumulated Amortization	\$105,947	\$56,185		\$8,275	\$170,407
Amortization	\$429,295	\$232,358		\$82,654	\$744,307
Closing Accumulated Amortization	\$535,242	\$288,543	\$0	\$90,929	\$914,714
Net Carrying Amount Year End	\$31,656,835	\$10,167,575	\$117,899	\$322,339	\$42,264,648
2011					
Opening Cost Value	\$32,192,077	\$10,456,118	\$117,899	\$413,268	\$43,179,362
Additions	\$186,169		\$0	\$13,721	\$199,890
Closing Cost Value	\$32,378,246	\$10,456,118	\$117,899	\$426,989	\$43,379,252
Opening Accumulated Amortization	\$535,242	\$288,543		\$90,929	\$914,714
Amortization	\$430,011	\$232,358		\$84,026	\$746,395
Closing Accumulated Amortization	\$965,253	\$520,901	\$0	\$174,955	\$1,661,109
Net Carrying Amount Year End	\$31,412,993	\$9,935,217	\$117,899	\$252,034	\$41,718,143
2012					
Opening Cost Value	\$32,378,246	\$10,456,118	\$117,899	\$426,989	\$43,379,252
Additions	\$2,478,887		\$0		\$2,478,887
Closing Cost Value	\$34,857,133	\$10,456,118	\$117,899	\$426,989	\$45,858,139
Opening Accumulated Amortization	\$965,253	\$520,901		\$174,955	\$1,661,109
Amortization	\$433,237	\$232,358		\$85,398	\$750,993
Closing Accumulated Amortization	\$1,398,490	\$753,259	\$0	\$260,353	\$2,412,102
Net Carrying Amount Year End	\$33,458,643	\$9,702,859	\$117,899	\$166,636	\$43,446,037
2013					
Opening Cost Value	\$34,857,133	\$10,456,118	\$117,899	\$426,989	\$45,858,139
Additions	\$6,317,068		\$0	\$0	\$6,317,068
Closing Cost Value	\$41,174,201	\$10,456,118	\$117,899	\$426,989	\$52,175,207
Opening Accumulated Amortization	\$1,398,490	\$753,259		\$260,353	\$2,412,102
Amortization	\$433,237	\$232,358		\$85,398	\$750,993
Closing Accumulated Amortization	\$1,831,727	\$985,618	\$0	\$345,751	\$3,163,095
Net Carrying Amount Year End	\$39,342,474	\$9,470,500	\$117,899	\$81,238	\$49,012,112

### Appendix H Shirley McClellan Regional Water System Tangible Capital Assets

	Pipelines	Transfer Station	Land	Machinery Equipment	Total
2014					
Opening Cost Value	\$41,174,201	\$10,456,118	\$117,899	\$426,989	\$52,175,207
Additions	\$8,748,947		\$0	\$0	\$8,748,947
Closing Cost Value	\$49,923,148	\$10,456,118	\$117,899	\$426,989	\$60,924,154
Opening Accumulated Amortization	\$1,831,727	\$985,618		\$345,751	\$3,163,095
Amortization	\$517,465	\$232,358		\$81,238	\$831,061
Closing Accumulated Amortization	\$2,349,192	\$1,217,976	\$0	\$426,989	\$3,994,156
Net Carrying Amount Year End	\$47,573,956	\$9,238,142	\$117,899	\$0	\$56,929,998
2015					
Opening Cost Value	\$49,923,148	\$10,456,118	\$117,899	\$426,989	\$60,924,154
Additions	\$2,107,300	\$0	\$0	\$0	\$2,107,300
Closing Cost Value	\$52,030,448	\$10,456,118	\$117,899	\$426,989	\$63,031,454
Opening Accumulated Amortization	\$2,349,192	\$1,217,976		\$426,989	\$3,994,156
Amortization	\$634,117	\$232,358		\$0	\$866,475
Closing Accumulated Amortization	\$2,983,309	\$1,450,334	\$0	\$426,989	\$4,860,631
Net Carrying Amount Year End	\$49,047,139	\$9,005,784	\$117,899	\$0	\$58,170,823
2016					
Opening Cost Value	\$52,030,448	\$10,456,118	\$117,899	\$426,989	\$63,031,454
Additions	\$2,756,000	\$0	\$0	\$0	\$2,756,000
Closing Cost Value	\$54,786,448	\$10,456,118	\$117,899	\$426,989	\$65,787,454
Opening Accumulated Amortization	\$2,983,309	\$1,450,334		\$426,989	\$4,860,631
Amortization	\$662,215	\$232,358		\$0	\$894,573
Closing Accumulated Amortization	\$3,645,523	\$1,682,692	\$0	\$426,989	\$5,755,204
Net Carrying Amount Year End	\$51,140,925	\$8,773,426	\$117,899	\$0	\$60,032,250
2017					
Opening Cost Value	\$54,786,448	\$10,456,118	\$117,899	\$426,989	\$65,787,454
Additions	\$8,190,725		\$0	\$0	\$8,190,725
Closing Cost Value	\$62,977,173	\$10,456,118	\$117,899	\$426,989	\$73,978,179
Opening Accumulated Amortization	\$3,645,523	\$1,682,692		\$426,989	\$5,755,204
Amortization	\$698,961	\$232,358		\$0	\$931,319
Closing Accumulated Amortization	\$4,344,485	\$1,915,050	\$0	\$426,989	\$6,686,523
Net Carrying Amount Year End	\$58,632,688	\$8,541,068	\$117,899	\$0	\$67,291,656

### Appendix H Tangible Capital Asset Details

### Appendix H Shirley McClellan Regional Water System Tangible Capital Assets

	Pipelines	Transfer Station	Land	Machinery Equipment	Total
Amorization Period in Years	75	45		5	
2010					
Opening Cost Value	\$31,784,173	\$10,113,271	\$117,899	\$165,508	\$42,180,851
Additions	\$407,904	\$342,847		\$247,760	\$998,511
Closing Cost Value	\$32,192,077	\$10,456,118	\$117,899	\$413,268	\$43,179,362
Opening Accumulated Amortization	\$105,947	\$56,185		\$8,275	\$170,407
Amortization	\$429,295	\$232,358		\$82,654	\$744,307
Closing Accumulated Amortization	\$535,242	\$288,543	\$0	\$90,929	\$914,714
Net Carrying Amount Year End	\$31,656,835	\$10,167,575	\$117,899	\$322,339	\$42,264,648
2011					
Opening Cost Value	\$32,192,077	\$10,456,118	\$117,899	\$413,268	\$43,179,362
Additions	\$186,169		\$0	\$13,721	\$199,890
Closing Cost Value	\$32,378,246	\$10,456,118	\$117,899	\$426,989	\$43,379,252
Opening Accumulated Amortization	\$535,242	\$288,543		\$90,929	\$914,714
Amortization	\$430,011	\$232,358		\$84,026	\$746,395
Closing Accumulated Amortization	\$965,253	\$520,901	\$0	\$174,955	\$1,661,109
Net Carrying Amount Year End	\$31,412,993	\$9,935,217	\$117,899	\$252,034	\$41,718,143
2012					
Opening Cost Value	\$32,378,246	\$10,456,118	\$117,899	\$426,989	\$43,379,252
Additions	\$2,478,887		\$0		\$2,478,887
Closing Cost Value	\$34,857,133	\$10,456,118	\$117,899	\$426,989	\$45,858,139
Opening Accumulated Amortization	\$965,253	\$520,901		\$174,955	\$1,661,109
Amortization	\$433,237	\$232,358		\$85,398	\$750,993
Closing Accumulated Amortization	\$1,398,490	\$753,259	\$0	\$260,353	\$2,412,102
Net Carrying Amount Year End	\$33,458,643	\$9,702,859	\$117,899	\$166,636	\$43,446,037
2013					
Opening Cost Value	\$34,857,133	\$10,456,118	\$117,899	\$426,989	\$45,858,139
Additions	\$6,317,068		\$0	\$0	\$6,317,068
Closing Cost Value	\$41,174,201	\$10,456,118	\$117,899	\$426,989	\$52,175,207
Opening Accumulated Amortization	\$1,398,490	\$753,259		\$260,353	\$2,412,102
Amortization	\$433,237	\$232,358		\$85,398	\$750,993
Closing Accumulated Amortization	\$1,831,727	\$985,618	\$0	\$345,751	\$3,163,095
Net Carrying Amount Year End	\$39,342,474	\$9,470,500	\$117,899	\$81,238	\$49,012,112

### Appendix H Shirley McClellan Regional Water System Tangible Capital Assets

	Pipelines	Transfer Station	Land	Machinery Equipment	Total
2014					
Opening Cost Value	\$41,174,201	\$10,456,118	\$117,899	\$426,989	\$52,175,207
Additions	\$8,748,947		\$0	\$0	\$8,748,947
Closing Cost Value	\$49,923,148	\$10,456,118	\$117,899	\$426,989	\$60,924,154
Opening Accumulated Amortization	\$1,831,727	\$985,618		\$345,751	\$3,163,095
Amortization	\$517,465	\$232,358		\$81,238	\$831,061
Closing Accumulated Amortization	\$2,349,192	\$1,217,976	\$0	\$426,989	\$3,994,156
Net Carrying Amount Year End	\$47,573,956	\$9,238,142	\$117,899	\$0	\$56,929,998
2015					
Opening Cost Value	\$49,923,148	\$10,456,118	\$117,899	\$426,989	\$60,924,154
Additions	\$2,107,300	\$0	\$0	\$0	\$2,107,300
Closing Cost Value	\$52,030,448	\$10,456,118	\$117,899	\$426,989	\$63,031,454
Opening Accumulated Amortization	\$2,349,192	\$1,217,976		\$426,989	\$3,994,156
Amortization	\$634,117	\$232,358		\$0	\$866,475
Closing Accumulated Amortization	\$2,983,309	\$1,450,334	\$0	\$426,989	\$4,860,631
Net Carrying Amount Year End	\$49,047,139	\$9,005,784	\$117,899	\$0	\$58,170,823
2016					
Opening Cost Value	\$52,030,448	\$10,456,118	\$117,899	\$426,989	\$63,031,454
Additions	\$2,756,000	\$0	\$0	\$0	\$2,756,000
Closing Cost Value	\$54,786,448	\$10,456,118	\$117,899	\$426,989	\$65,787,454
Opening Accumulated Amortization	\$2,983,309	\$1,450,334		\$426,989	\$4,860,631
Amortization	\$662,215	\$232,358		\$0	\$894,573
Closing Accumulated Amortization	\$3,645,523	\$1,682,692	\$0	\$426,989	\$5,755,204
Net Carrying Amount Year End	\$51,140,925	\$8,773,426	\$117,899	\$0	\$60,032,250
2017					
Opening Cost Value	\$54,786,448	\$10,456,118	\$117,899	\$426,989	\$65,787,454
Additions	\$8,190,725		\$0	\$0	\$8,190,725
Closing Cost Value	\$62,977,173	\$10,456,118	\$117,899	\$426,989	\$73,978,179
Opening Accumulated Amortization	\$3,645,523	\$1,682,692		\$426,989	\$5,755,204
Amortization	\$698,961	\$232,358		\$0	\$931,319
Closing Accumulated Amortization	\$4,344,485	\$1,915,050	\$0	\$426,989	\$6,686,523
Net Carrying Amount Year End	\$58,632,688	\$8,541,068	\$117,899	\$0	\$67,291,656