

**Table 1 – Proposed Energy Conservation Measures**

Energy Conservation Measure (ECM)	Scope Summary	Project Cost
ECM2 – Centrate Nutrient Recovery	Construct new prefab building Install one Ostara Pearl 2000 reactor and appurtenances Tie-ins to plant’s utilities	\$6,760,860
ECM4A - Biogas Cogeneration	Demolish existing cogen system Install new 850kW cogen system	\$5,116,967
ECM4B – Digester Dome Repair	Repair Digester covers #1 and #3	\$3,121,795
ECM6 – Dewatering System Upgrades	Replace two centrifuges Replace two cake pumps Replace cake piping, valves, actuators Electrical, instrumentation, and controls	\$6,066,614
ECM7 – Lighting System Upgrade	Upgrade 1,558 light fixtures	\$428,761
ECM9 – Near Term Dewatering Upgrade	Repair dewatered sludge hoppers Install new dewatering polymer system Upgrade HVAC and air purge systems Modification to alum and centrate piping	\$3,005,202
ECM10 – MyEnergy Pro	MyEnergyPro utility/savings monitoring system	\$50,625
Detailed Energy Audit		\$149,835
Performance, Payments Bonds, Permits		\$210,930
	TOTAL	\$24,911,589

## Table 2 - Project Costs and Savings

Measure #	Conservation Measure	Total Annual Savings	Energy/Chemical Savings Project Cost	Capital Repair Items	Total Project Pricing	Utility Rebate
2	Centrate Nutrient Recovery (Ostara)	\$675,985.00	\$6,760,860.00		\$6,760,860.00	
4A	Biogas Cogeneration (850 kW)	\$215,514.00		\$5,116,967.00	\$5,116,967.00	
4B	Digester Domes Rehabilitation	\$0.00		\$3,121,795.00	\$3,121,795.00	
6	Dewatering System Upgrade	\$200,954.00	\$6,066,614.00		\$6,066,614.00	
7	Lighting System Upgrade	\$30,434.00	\$428,761.00		\$428,761.00	\$15,995.00
9	Near Term Dewatering Improvement	\$0.00		\$3,005,202.00	\$3,005,202.00	
10	MyEnergy Pro	\$0.00	\$50,625.00		\$50,625.00	
	<b>TOTAL</b>	<b>\$1,122,887.00</b>	<b>\$13,306,860.00</b>	<b>\$11,243,964.00</b>	<b>\$24,550,824.00</b>	<b>\$15,995.00</b>
	<b>Construction Period Savings</b>	<b>\$1,044,422.00</b>				

<b>Simple Payback (Years) w/ Cogen</b>
--

<b>15.5</b>
-------------

<b>Simple Payback (Years) w/o Cogen</b>
---

<b>13.5</b>
-------------

**Table 3- Cost Sharing Between the Cities of Sparks and Reno**

<u>COST BREAKDOWN</u>	<u>SPARKS SHARE</u>	<u>RENO SHARE</u>
\$24,911,589.00	\$7,814,765.47	\$17,096,823.54
TMWRF OWNERSHIP SPLITS	31.37%	68.63%