## How Does Water Management Impact My Farm? And My Province:

## **ACTUAL FARM EXPENSES:**

2013					
Fuel	Repairs	Seed	Chemical	Fertilizer	Insurance
44,826.37	18,741.64	104,789.44	84,297.92	156,695.91	33,539.42
2014					
Fuel	Repairs	Seed	Chemical	Fertilizer	Insurance
44,833.78	34,103.78	15,691.75	55,423.64	138,529.21	26,231.92
2015					
Fuel	Repairs	Seed	Chemical	Fertilizer	Insurance
40,596.02	29,902.81	65,845.50	69,378.15	123,513.77	21,059.68
2016					
Fuel	Repairs	Seed	Chemical	Fertilizer	Insurance
32,255.35	29,243.18	11,424.04	88,425	124,489.40	17,326.8
2017					
Fuel	Repairs	Seed	Chemical	Fertilizer	Insurance
47,065.86	40,195.87	36,953.96	59,116.60	171,712.22	18,058.65
TOTALS					
169,021.95	152,187.28	234,704.69	426,019.46	714,940.51	116,216.47

Total cash costs\$ 1,578,620.20 5 year average \$315,724.04 2,195 total acres = \$143.84 per acre 5 year average grain sales \$893,214.42 2,195 acres =\$407 gross revenue per acre \$407.00 -143.84= \$263.16 per acre

Fixed costs- \$205 per acre (payments, taxes, living and depreciation)

PROFIT = \$58 PER ACRE. PROFIT MARGIN = 17%

There is 88,000 acres of sloughs in the Quill Lakes basin 88,000 x \$58 per acre = \$ 5,100,000 lost revenue

Affected perimeter area around these sloughs where crop is reduced is 78,000 acres (salinity) 78,000 acres x \$407 gross revenue = \$ 31,750,000 lost revenue

Overlap is estimated at 60,000 acres

60,000 acres x \$143.84 cash costs = \$8,600,000

Total lost revenue= \$45,500,000

Approximately 1,500,000 cultivated acres in the basin:

\$45,500,000 lost revenue on 1,500,000 acres = \$30 per acre lost \$58 with water management, less \$30 without water management = \$28

## Profit margin would be reduced from 17% to 8% or a total reduction in profits of 52%

## These results are conservative:

- These numbers are from 2013- 2017 which had some of the best crops in farming history. Average crop yields during this period were well above 17% of historic yields
- Sloughs are where your best crops are. Not uncommon for yields to be a 30%-50% higher
- The 78,000 acres of affected perimeter area will increase substantially as salinity becomes more of a factor
- Realistically a 17% profit margin would be closer to 0%. In a business where negative margins occur this would end profitability in agriculture in the Quill Lakes basin.