

Lake Manitoba Commercial Fishery Proposal

a management model for growth
and sustainability through
enhancement and vision

why do we need a plan?

- The commercial fishery has never had management
- We have only “regulations”
- Regulations were implemented to stomp out a deemed problem but ended up creating new problems that required more regulations
- Management has been too unilateral and too uninformed of real issues

WHY DO WE NEED A PLAN?

- Industry must take the lead to comply with the demands of a global market that demands good stewardship, and proven sustainable practises
ie. ECO-LABELLING

WHERE DO WE GO FROM
HERE

A QUICK HISTORY OF THE
FISHERY

BREIF HISTORY

The commercial fishery on Lake Manitoba has been subject to many changes in it's 120 year history. There has been everything from open water seasons that were totally unregulated to management regulations that saw species added and deleted from quota. Season opening and closing dates along with mesh size and tolerances have also been "toyed "with.

All of these regulating changes lacked one major insight in their implementation, and that was a long term, fully comprehensive, industry and stock sustainability. Nor was the thought of a total package where fish stocks, harvester livelihoods, environmental change, and all the factors of a viable fishery considered.

The consideration of a “hands on” proactive management , capitalizing on the combined sector expertise of the regulators, the industry, and the marketing bodies was unfortunately never taken to account

Now all this considered, the question is “where do we go from here”

It has become increasingly clear to the industry stakeholders that changes must be made to the commercial fishery to address all the concerns we are experiencing. We must have a plan that takes to account all of the negative impacts that the fishery is undergoing.

We must have a proposal that is all encompassing, stability oriented, that looks at every major factor affecting the industry to the mutual benefit of industry and the resource.

What has industry been doing?

- THE LMCFA has been very proactive in enhancement projects
- We built and now run several hatcheries
- We have developed working partnerships with other groups to restock walleye in Lake Manitoba
- We have done extensive research into most effective practises of restocking

What has industry been doing?

- Recorded information from Ontario DNR on raising walleye from spawn to brood stock (first of it's kind)
- Visited Minnesota site where walleye fry are raised to fingerlings for restocking and formed a working relationship
- Information gathering trip to Garrison were multi- species are raised for restocking and developed information sharing

What has industry been doing

- Met with DFO Minister Hearn and presented idea of change of management regime
- Worked through the CCPFH and met with DFO and all provinces and helped institute a federal fishery management plan called Ocean to Plate that was inclusive of all industry sectors (Sept, 07, Montreal)

What has industry been doing?

- Held numerous meetings with industry members to identify problematic changes that are plaguing industry
- Worked with members for solutions to the problems identified
- Utilized all the state of the art information accumulated our research to envision a commercial fishery management plan

What has industry been doing?

- Developed a commercial fishery management plan for Lake Manitoba
- The concept behind this plan is one that should be applied to every commercial fishery
- Concept is simple to apply
- all sector input +vision for future (enhancement) =growth and sustainability

What has industry identified?

- Environmental Change -----
--which includes everything from surrounding land use changes, to drainage, water quality, cottage development, man made artificial water levels, and the loss of fish spawning habitat.

What has industry identified?

- Climate Change-----
-while the jury may be out on global warming, it is a fact that out of the past six years we have lost one complete season due to the fact that we are not having normal freeze ups times. From severe winds that take ice off and destroy gear, impeding opportunity to harvest, to one past winter that didn't come at all

What has industry identified?

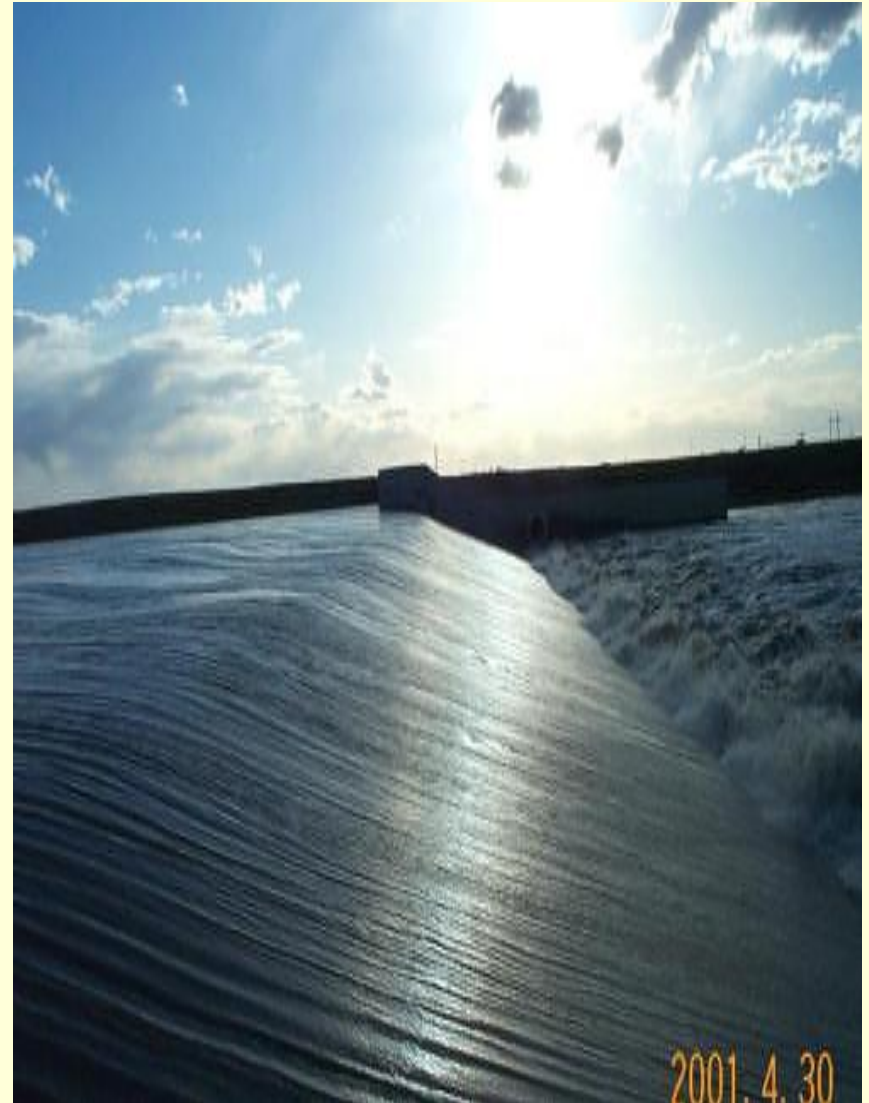
- Man Made Change-----
-the portage diversion and the fairford dam have caused more havoc than any other single factor. reduced water quality, silted in large portions of south basin, destroyed spawning habitat ,introduced new species, relocated natural stocks, loaded nutrients causing algae blooms into winter, and blocked natural fish movement

What has industry identified?

- Management Change-----
-or rather the need for it---the lack of resources and the approach taken has been nothing short of appalling. Today's answer from fisheries branch is to reduce quota or opportunity. This “bury your head” needs a rehabilitant mindset. Never was a over harvesting problem, but a fishery “rejuvenating” problem

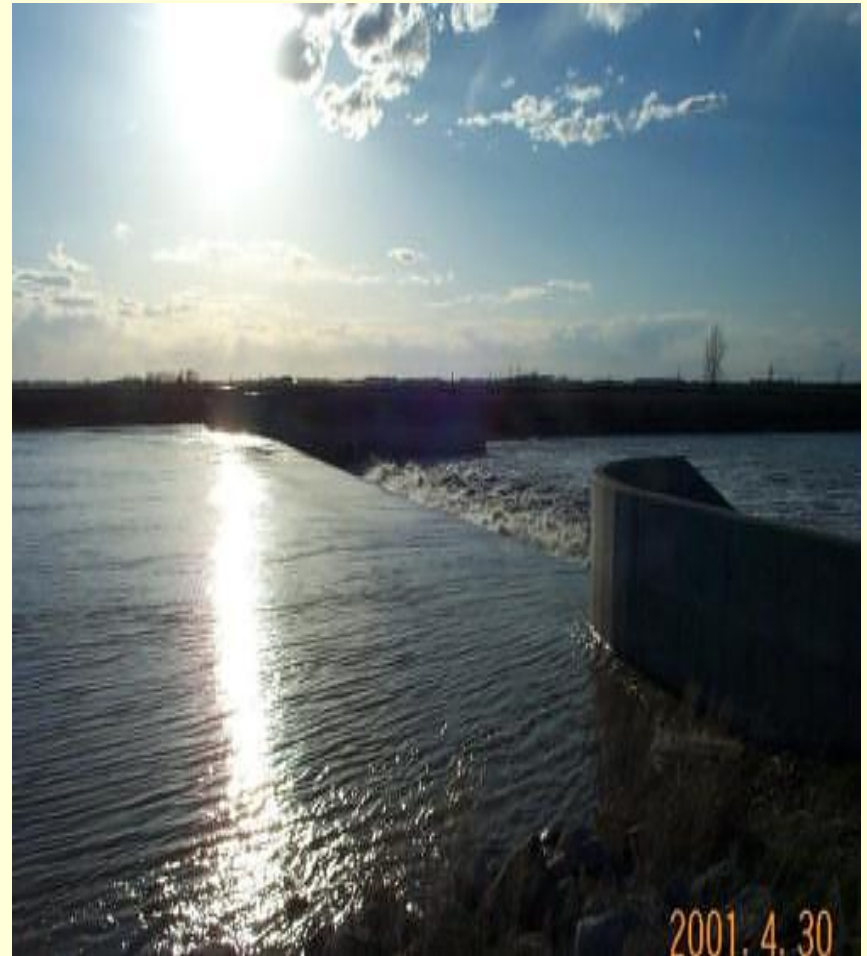
Portage Diversion

- This may help save millions of dollars to Winnipeg residents
- Built with out any environmental study
- Destroyed spawning areas of south basin
- Introduced foreign species
- Deposited tons of sediment



Portage Diversion

- Relocated fish stocks
- Reduced water quality and causes algae blooms
- Hundreds of millions in irreversible damage
- Manitoba does it-but North Dakota can't-hypocritical-re: Devils Lake



FAIRFORD DAM

- Built to alleviate flooding, has caused more floods than prevented
- Complete impasse to fish movement
- After 48 years, walleye and whitefish no longer migrate on spawn runs



FAIRFORD DAM

- 1983-1984 fish ladder was added
- Ladder found to be of no positive effect-18 inch hole in a 600 foot river---and is usually blocked up with trash-



Terms and conditions of new season and fishery management

The LMCFA proposes that a new fall open water season be implemented on Lake Manitoba. The existing quota for the winter season should be reduced by five hundred thousand pounds (500,000 LBS.) and that portion then be divided into one hundred (100) five thousand pound (5000lbs) individual transferable quotas. These quotas would be sold to existing fishermen for a price to be determined by current market conditions. The quotas would be offered for sale to the top 100 producers first, and if declined, would work down the list in order of production. After the initial sale the quotas would be transferable , but no fisherman could own more than two quotas total. The monies realized from this sale would be held in a trust fund and should it be found necessary to ever buy back quota. This fund (\$1,000,000 or more) should generate substantial interest and after ten percent (10%) is reinvested, the balance would finance the projects to rejuvenate the pickeral/sauger stocks on Lake Manitoba.

A trustee board, of industry seats, provincial seats, and marketing seats, would oversee the dispersing of funds to the activities and projects that are proposed to bring the lake to it's fullest potential. This board will review all information and develop a short and long term plan for the fish stocks and harvesters.

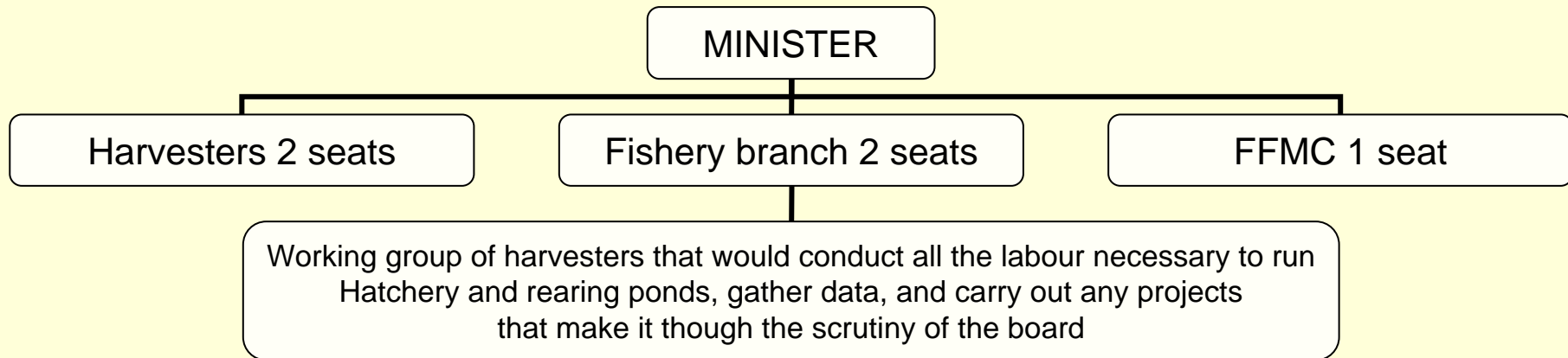
Terms and conditions of new season and fishery management

All projects will be evaluated as to their cost and effectiveness and if they are contributing to the short and long term objectives set out in the plan. This board would meet on a twice yearly basis to review all proposals and make changes if necessary to make sure goals are being met.

With this ideal in place, incorporating the concept of joint management, we will not only have the necessary funds to do more enhancement and monitoring of stocks , but the man power to facilitate them.

There will be no change at this time to the total allowable catch, but we should see in the years to come, dramatic increases to the regularity in which the total allowable catch is harvested because of our efforts in bringing the fish stocks to their full potential by various enhancement projects.

Trustee Board Governance



Trustee Duties

- Develop a one year, three year, and ten year objective
- Monitor programs in place and make sure the meet objectives
- Review any new proposals and tailor to meet plan objectives
- Provide a fluid plan that can accommodate quick transition to current conditions

Management Proposals

objectives	solutions	short/long term
Restock harvested pickerel at a five to one ratio -----	Construct rearing pond acreage to handle fry -----	Construction is the limiting factor -----
Enhance fish stocks to make TAC possible	Rearing ponds	3 years from construction

Does restocking work?

While the Fishery Branch in Manitoba sits in a cubicle and makes statements like “ the jury is still out if restocking works”, the LMCFA has travelled to numerous locations mostly in the US and Ont. The tremendous success of their stocking programs is phenomenal. We have worked with some of these groups to develop with our partners a hatchery /rearing pond stocking program.

One particular lake in Minnesota that is about one half the size of Lake Manitoba’s south basin harvests 750,000 lbs of walleye consistently each year. This is totally from restocking into a multi specie lake.

On another lake almost 90% of fish harvested come from restocking.



Does restocking work?

The Garrison Hatchery is most impressive. It has over sixty cells and raises more than eight different species, including sturgeon. All of these fingerlings are restocked and according to their figures make up the bulk of the fish going into many lakes.

Once the infrastructure is in place the overhead is very low to raise the fingerlings

This facility was built to mitigate all the harm that was done to spawning habitat due to aggressive agriculture and drainage programs

It paid for itself in three years in the value of fish stocked and harvested



Does restocking work?

- Not only will this idea work for restocking and enhancing our fishery, but it could be utilized to raise sturgeon (see picture) and help meet obligation to SARA



Does restocking work?

The LMCFA has been running our own hatchery for over a decade. We since have learned that fry stocking is not as affective as fingerling stocking. We have developed partnerships with Alonsa conservation district, the MMF, to run and build hatcheries and rearing sites.

We have restocked over 100 million fry and 200,000 fingerlings.

It is the experience and success of these ventures that has led to the vision of a management plan that will in essence transform the commercial fishery.



Does restocking work?

There is not a single aqua-culture project that is profitable. We have visited them from salmon farms, yellow perch, to talpholi. The two most common reasons were, the high cost of infrastructure with the land locked farms, and the low prices of fish with the ocean confinement farms. Then add disease to the equation and it turns bleak.

However with our plan of hatching and stocking of fingerlings into the lake, we have capture the spirit of aqua-culture without any of the negative effects.

Not only will the commercial fisherman have a consistent, profitable, and sustainable fishery, under this scenario, but it will have a huge spin-off to the sport and recreational fishery

We have done our homework on this venture, and have eliminated the risk by duplicating the success of others.

Because of all the preliminary reviewing we have done it is possible to project a cost / benefit and a capital recapture estimate of this proposal.

Sample of our walleye released



COSTS / RECAPTURES

Lets do some quick math to show the expenditures necessary and the time frame for return on investment.

Assuming a restocking at a five to one ratio:

Quota = 2 million lbs @ a average of a 2 lb fish = 1 million fish harvested = 5 million fingerlings restocked

So at 150-200 thousand fry per rearing pond we would need 30 one acre ponds

At a cost of \$100,000 each = \$3 million for construction of two sites of 15 ponds each, land acquisition, hydro, and road access, aeration equipment, etc. In essence read to go.

Operating costs would be carried by the interest from the generated from the established trust fund, and the labourers and the necessary training from the industry

The first harvest of the restocked fish would show in the third year and would steadily increase until quota was filled every year following

At an average harvest now of 500,000, projected increase would be 50% in year three to a full quota harvest by year six

If we use today's prices:

Year three-----increase-----\$465,000

Year four-----increase-----\$698,000

Year five-----increase-----\$1,048,000

Year six-----Increase-----\$2,795,000

NOW consider that this is just in returns to fishermen, not including the “spin off”. You could multiply this by the factor of five to seven times for it’s effect on the economy

This is just the cash benefits to the commercial fishery, now think of the boost to the sport and recreational side???
(no wonder why our neighbours are years ahead of us)

Where does the money come from

- The infrastructure money for this fishery investment should be jointly shared by the province and the federal government.
- Operating costs should be funded by the trust fund.
- The funding can be found under existing aquaculture programs, western diversivaction , etc.

WHY GOVERNMENTS?

- A federal commission after the flood on 1950, recommended the construction of the red river diversion around the city of Winnipeg. This included the building of the Shellmouth Dam, the Portage Diversion. And the Fairford Dam
- There was no environmental impact study nor any assessment of any kind done before the project proceeded

WHY GOVERNMENTS?

- This act of “good faith” on their part to mitigate the horrendous damage this project has caused our fishery rather than litigate
- This would be in the spirit of co-management, and would be money well spent, versus the court challenge and the hundreds of millions in pending settlements

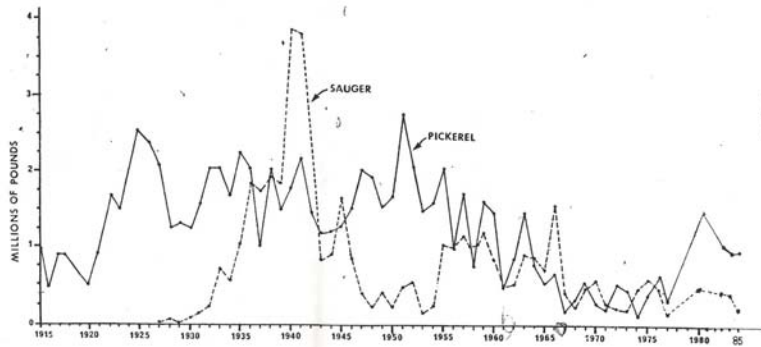
WHY INDUSTRY?

- Responsibility—first and foremost- industry must come and show we are responsible stewards of our renewable resources
- We must show this responsibility, not just at home, but to the global community, by our sustainability plan
- Re-investing in our livelihood is expected of any accountable industry

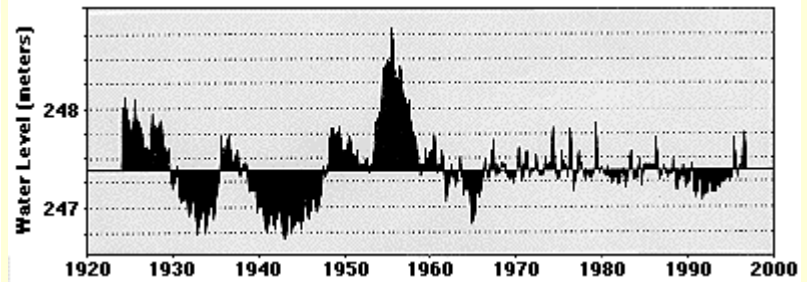
Point of interest

Notice the correlation between the high water flow years and the corresponding higher fish harvests in and after those years

Table 1. Lake Manitoba Pickerel & Sauger Production from 1915 to 1977.*

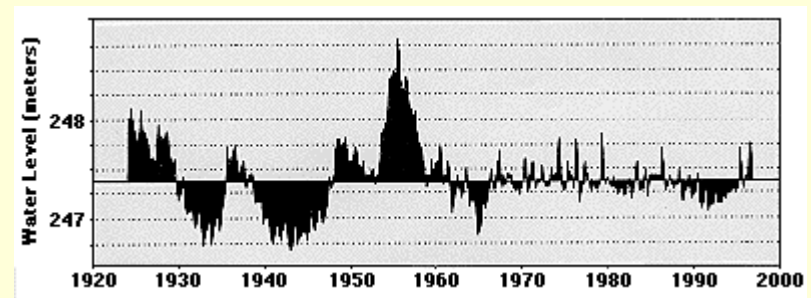
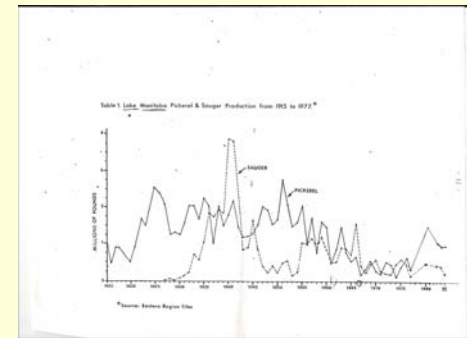
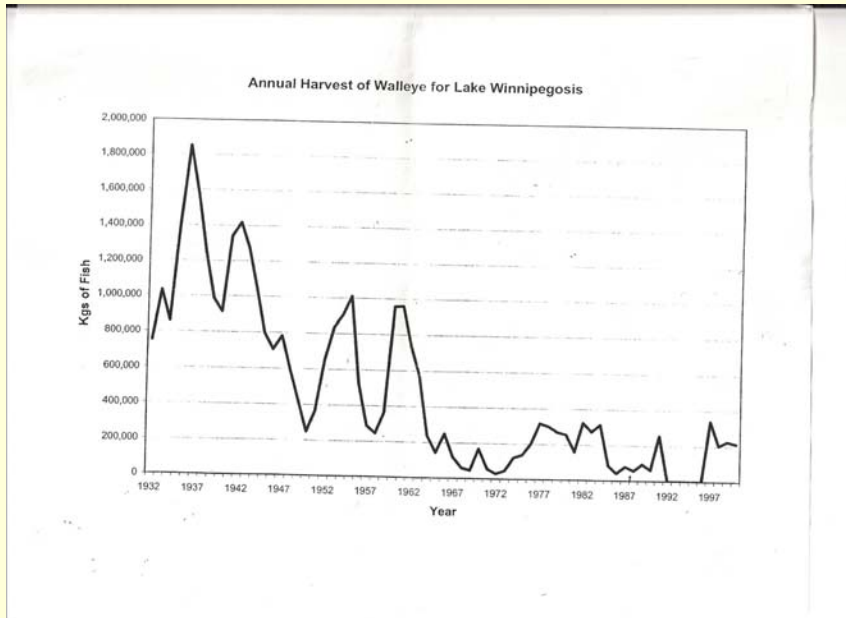


*Source: Eastern Region files



More Points

This is winnipegosis production notice
The drop and flat production since 1960



CONCLUSION

Change is a hard thing for many people to accept,---- but the “good old days” Are gone---- and they are never coming back. So change will come whether We want it or not. The days of –”I remember when” are just that—memories

But the key to change is whether we are reactive , and let the changes dictate To us and try to patch things up, and throw up our hands and say what do we Do now????----- Panic

OR

WE are PROACTIVE, and we take some control of change, and we mould and Manipulate conditions to unfold into what we envision. In sure a future for our Fish resource, our industry , and our generations to come.

To maintain the “status quo” is not an acceptable option

“Where there is no vision –the people perish”—(bible)

We have been given a great responsibility to oversee the well being of our resources –and we would be poor stewards if we fail to have a vision for the future

