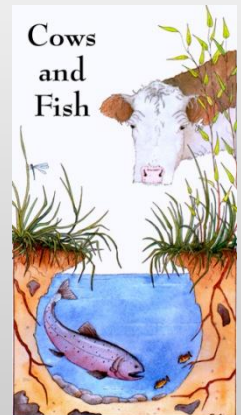


URBAN MYTH OR REALITY?

*PRESERVING OUR NATURAL CAPITAL
AND VALUING RIPARIAN AREAS*

ALMS Conference
October 2011





WHAT'S THE **CURRENT** REALITY?

- 26 % of riparian areas in Alberta are healthy.
- 20% of urban riparian areas assessed by C&F are healthy
- Putting a price on natural capital and utilising proximate principles for urban real estate pays off !





WHAT'S THE **FUTURE** REALITY?

- Greater than 26 % of riparian areas in Alberta are healthy!
- Municipalities incorporate riparian health into environmental policies!
- Real estate values include natural capital in determining pricing!

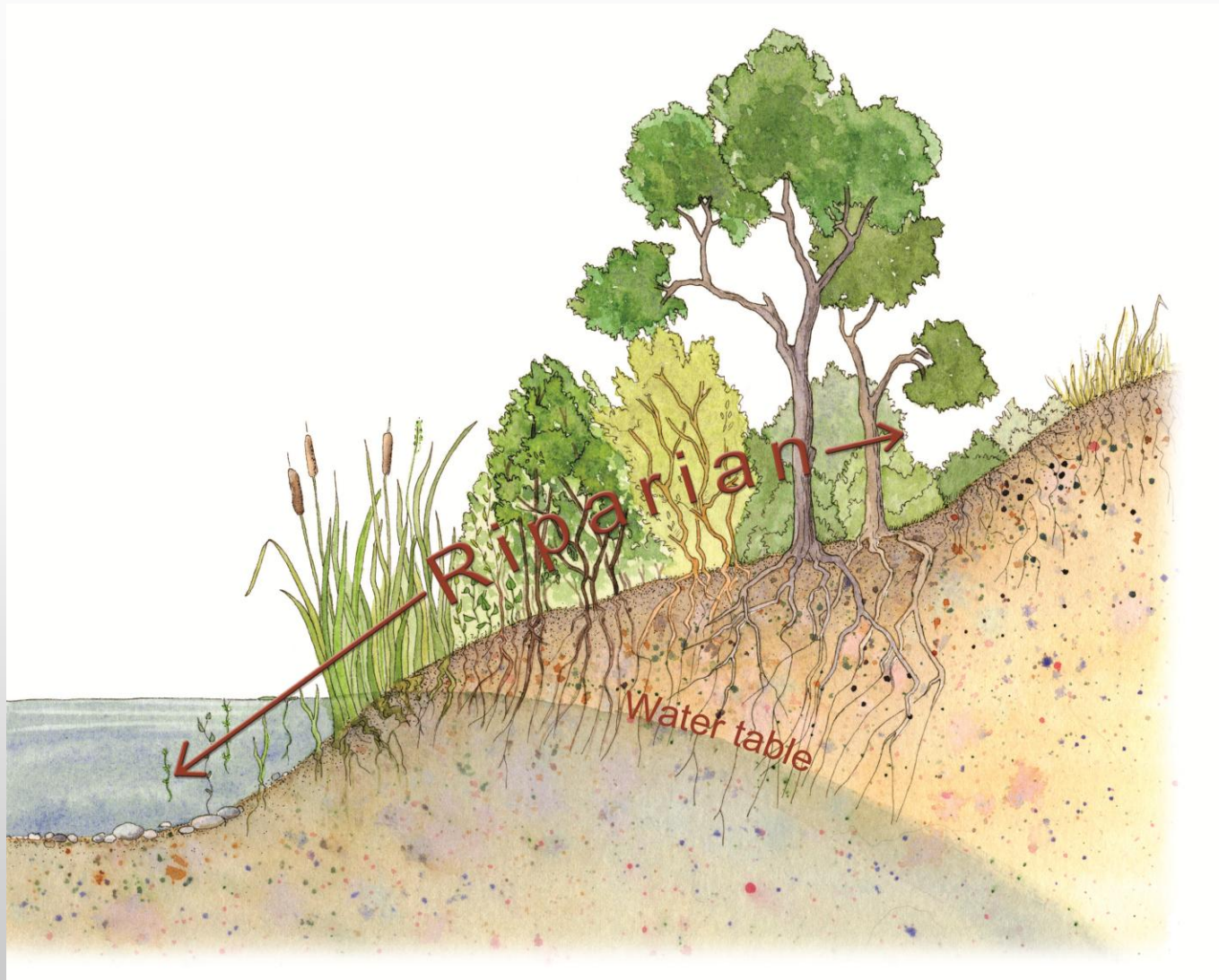


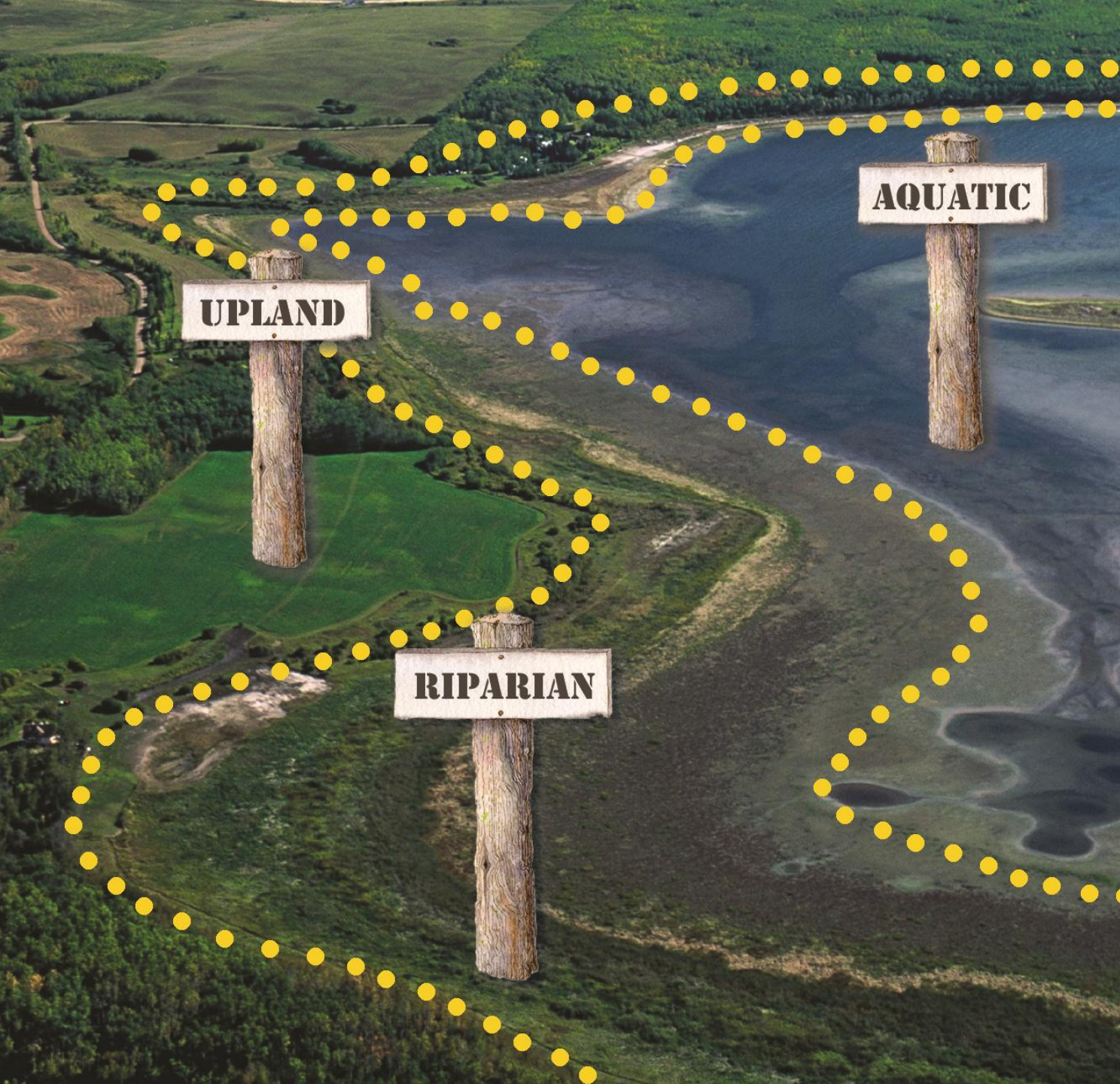
NATURAL CAPITAL (WHAT'S THAT?)

- Alberta's natural resources
- Eg. grasslands, water, wild spaces, agricultural lands, green spaces, wetlands
- Crucial to the viability of our economy
- “Nature as a barometer”









RIPARIAN AREAS AS NATURAL CAPITAL

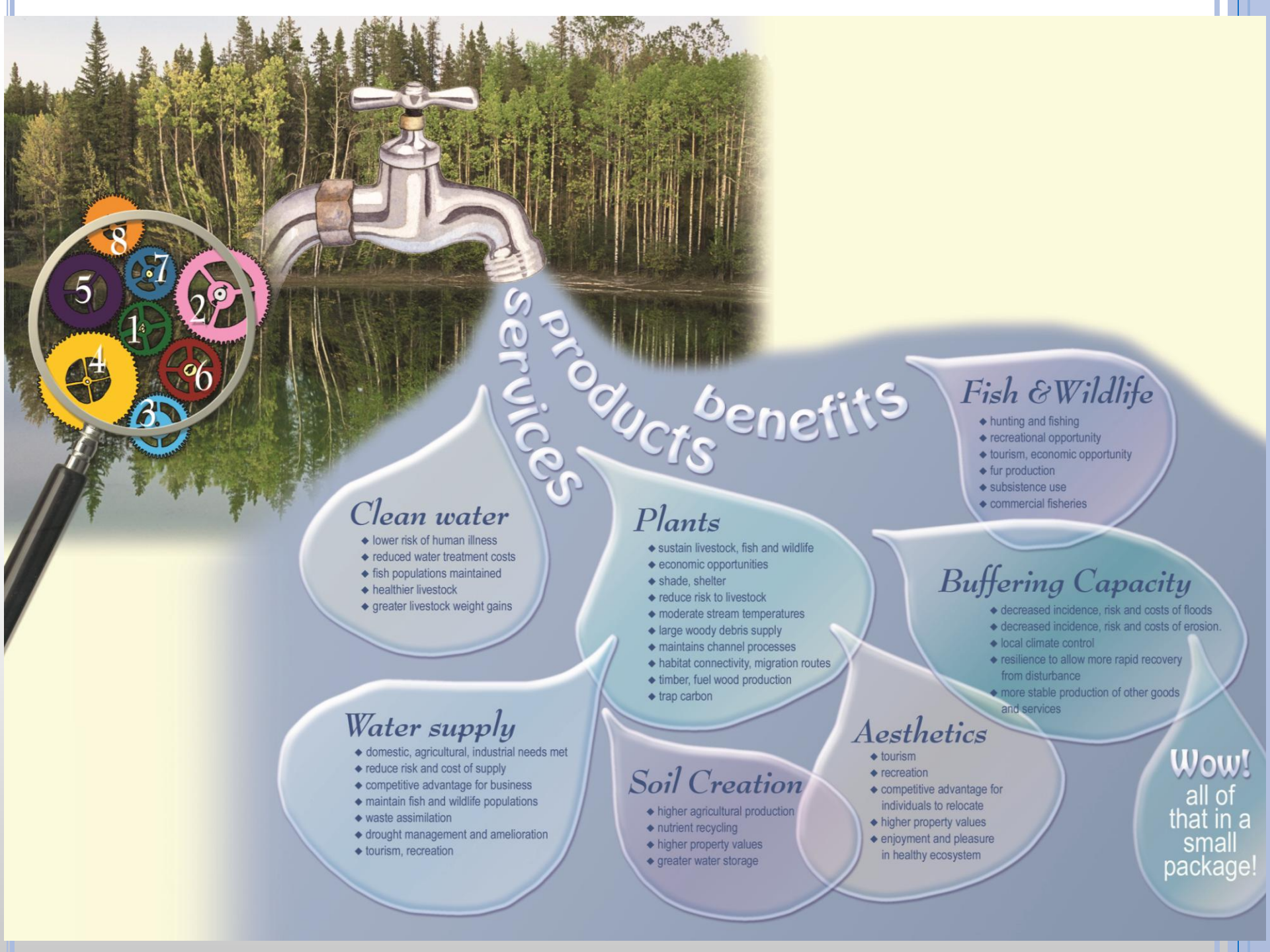




35% OF
LAKE &
WETLAND
RIPARIAN
AREAS
ARE
HEALTHY

NATURAL CAPITAL (WHO CARES?)

Natural Capital		Societal Benefit
		Water supply, water filtration, flood regulation, habitat, recreation
		Pollination, CO2 storage, food production, soil formation
		Food production, habitat, scenic
		Water supply, water filtration, habitat, food production, recreation
		Air quality, raw materials, habitat, CO2 storage, soil formation
		Scenic, CO2 storage, tourism, human health



ecosystem

Clean water

- ◆ lower risk of human illness
- ◆ reduced water treatment costs
- ◆ fish populations maintained
- ◆ healthier livestock
- ◆ greater livestock weight gains

Water supply

- ◆ domestic, agricultural, industrial needs met
- ◆ reduce risk and cost of supply
- ◆ competitive advantage for business
- ◆ maintain fish and wildlife populations
- ◆ waste assimilation
- ◆ drought management and amelioration
- ◆ tourism, recreation

Plants

- ◆ sustain livestock, fish and wildlife
- ◆ economic opportunities
- ◆ shade, shelter
- ◆ reduce risk to livestock
- ◆ moderate stream temperatures
- ◆ large woody debris supply
- ◆ maintains channel processes
- ◆ habitat connectivity, migration routes
- ◆ timber, fuel wood production
- ◆ trap carbon

Soil Creation

- ◆ higher agricultural production
- ◆ nutrient recycling
- ◆ higher property values
- ◆ greater water storage

Fish & Wildlife

- ◆ hunting and fishing
- ◆ recreational opportunity
- ◆ tourism, economic opportunity
- ◆ fur production
- ◆ subsistence use
- ◆ commercial fisheries

Buffering Capacity

- ◆ decreased incidence, risk and costs of floods
- ◆ decreased incidence, risk and costs of erosion.
- ◆ local climate control
- ◆ resilience to allow more rapid recovery from disturbance
- ◆ more stable production of other goods and services

Aesthetics

- ◆ tourism
- ◆ recreation
- ◆ competitive advantage for individuals to relocate
- ◆ higher property values
- ◆ enjoyment and pleasure in healthy ecosystem

Wow!
all of
that in a
small
package!

LOSS OF NATURAL CAPITAL

- Degraded water quality
- Increased water treatment costs
- Habitat loss (fish and aquatic species)

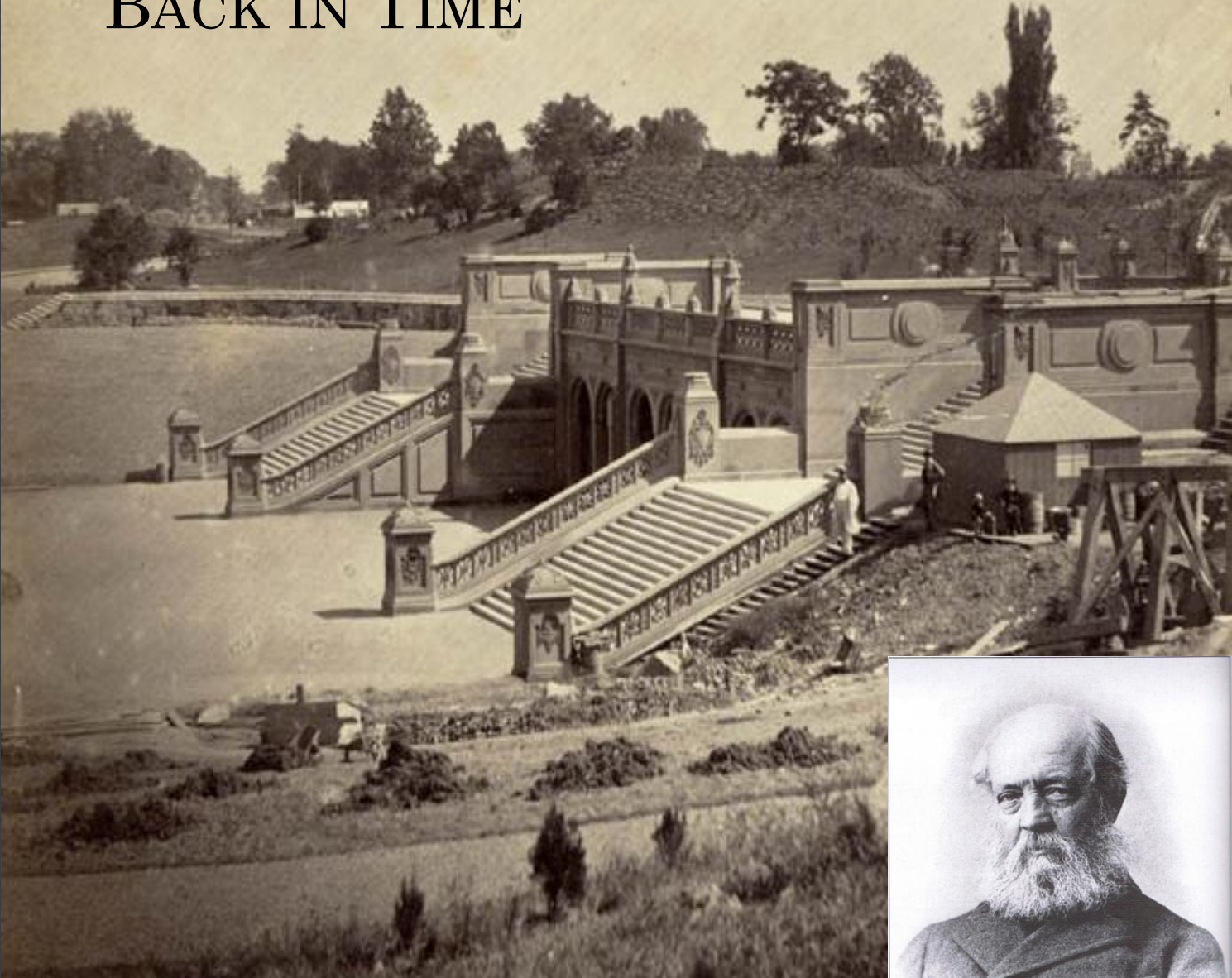
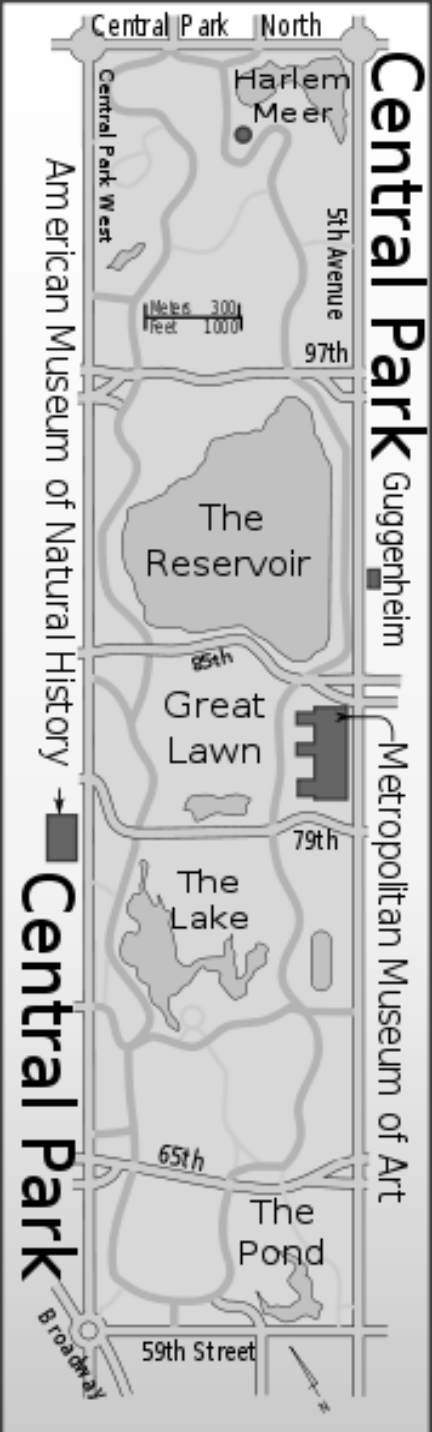


LOSS OF NATURAL CAPITAL

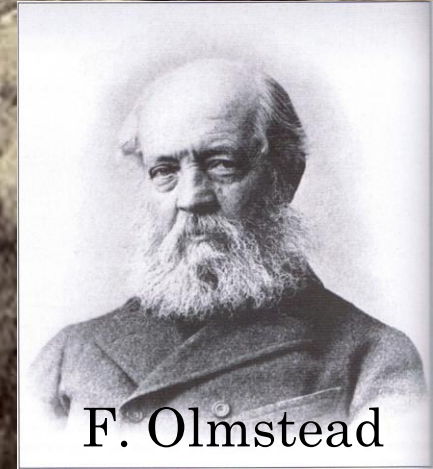
- Increased flood risks
- Increased insurance costs
- Decreased property values



NATURAL CAPITAL – A LOOK BACK IN TIME



New York's Central Park - 1862



F. Olmstead

NATURAL CAPITAL – NYC TODAY



For Sale: 843 acres constructed greenspace, close to shopping, business, dining and luxury living. The heart of the Big Apple. \$529 billion.

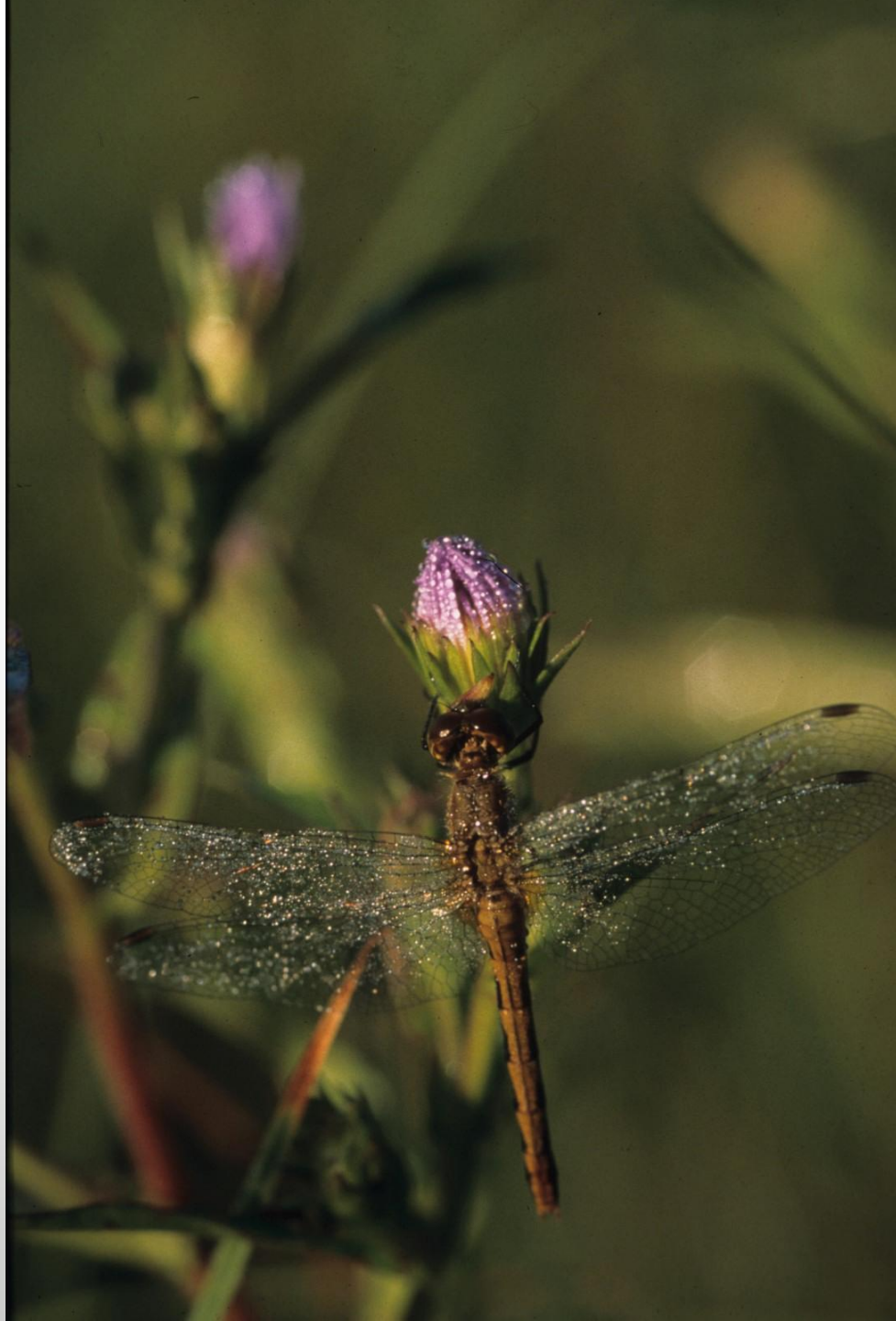




NATURAL CAPITAL – AN ALBERTA EXAMPLE

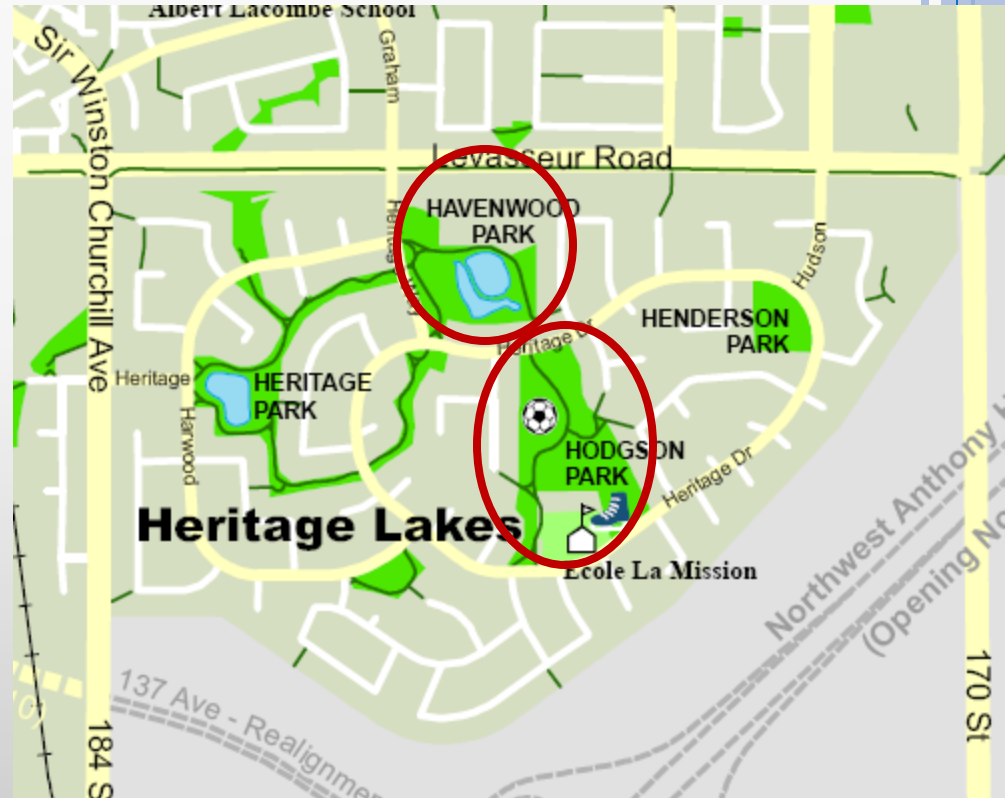
- Heritage Hills Wetlands Protection Project
- Sherwood Park, Strathcona County





ASSESSING PROXIMATE VALUE OF PARKS & OPEN SPACE TO RESIDENTIAL PROPERTIES IN ALBERTA

- 6 Alberta towns/cities
 - Proximate premiums range from high of over 15% to low of less than 1%
 - High premium parks combine well managed stormwater features, with a view & privacy
 - Low premium parks are smaller, active parks (eg. playgrounds/sports fields) associated with noise & privacy intrusion



ASSESSING PROXIMATE VALUE OF PARKS & OPEN SPACE TO RESIDENTIAL PROPERTIES IN ALBERTA

“Sherwood Park lots that command the highest assessment (proximate) premiums are those with views overlooking a wetland”



VALUING NATURAL CAPITAL – IN ALBERTA

- City of Edmonton

- **53% higher** median house price for single detached homes located near the North Saskatchewan River; **21% higher** for apartments (2006)



VALUING NATURAL CAPITAL – IN ALBERTA

CITY OF EDMONTON RIVER VALLEY

Service	Ecosystem	Low Estimate	High Estimate
		Millions	
Air quality / filtration:	Forest	\$4.2	\$156.0
Water quality / purification	Wetlands / riparian areas	\$0.1	\$0.4
Stormwater management	Forest	\$66.9	\$66.9
Erosion control	Forest	\$4.9	\$4.9
Carbon sequestration	Forest, shrubland, grassland	\$7.1	\$35.5
Pest control	Valley	\$0.8	\$0.8
Total		\$84.0	\$264.5



VALUING NATURAL CAPITAL

○ “*Treemendous* Benefits”

- Increased tax revenue
- Decrease water treatment facility costs / upgrades
Decrease costs associated with flooding
- Decreased noise levels



NATURAL CAPITAL – AT THE LAKE

- Protection of water quality – good for fish, fewer algal blooms, improved recreational opportunities
- Wildlife habitat and viewing opportunities
- Public safety – swimming, fishing
- Improved protection from water level fluctuations & flood





WHAT'S THE **FUTURE** REALITY?

- Greater than 26% of riparian areas in Alberta are healthy!
- Municipalities incorporate riparian health into environmental policies!
- Real estate values include natural capital in determining pricing!



MUNICIPAL ENVIRONMENTAL POLICIES & PROCEDURES

- Municipalities incorporate riparian health into environmental policies!
- Mountain View County, in 2008, incorporated Cows and Fish riparian health into developmental and land subdivision policies for properties with waterbodies of a certain class or sensitivity.
- Prescribed improvements (eg. riparian fencing) and riparian health assessment (score 70% or higher) are conditions of subdivision and development approval.



WILLIAMSTOWN – CITY OF AIRDRIE – *“A COMMUNITY THAT CONNECTS WITH NATURE”*



Image © 2010 DigitalGlobe
Image City of Airdrie
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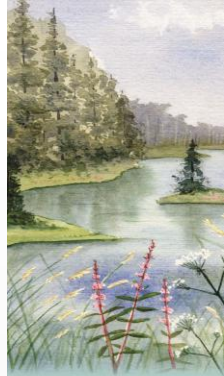


HOW TO ACHIEVE THE FUTURE REALITY? WHAT CAN YOU DO??

- Encourage your municipality to take a benchmark of riparian health
- Stop trying to sell hell and sell the sizzle!
- Work with local realtors or real estate associations or your municipality
- Pick some weeds, plant native trees.



- In Canada we have “national economic accounts” whose sum = Gross National Product
- Where are the “national ecological accounts” to define, measure & track ecological activities, whose sum = Gross National Waste
 - Preston Manning, National Stewardship & Conservation Conference, 2009, Calgary, AB



Cows and Fish

Members and Supporters

Alberta Beef Producers

Trout Unlimited Canada

Canadian Cattlemen's Association

Alberta Sustainable Resource Development

Alberta Environment

Alberta Agriculture and Rural Development

Agriculture and Agri-Food Canada - AESB

Fisheries and Oceans Canada

Alberta Conservation Association

Producers, municipalities and community groups in
Alberta

Funding Associates

Alberta Environmentally Sustainable Agriculture

Alberta Real Estate Foundation



Cows and Fish

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Cows and Fish

Contact Us

www.cowsandfish.org

- publications / factsheets
- riparian health checklists
- community stewardship ideas
- digital stories / videos / podcasts
- donations

