

eColi



toxic algae

# Ballston Lake & Watershed In Crisis

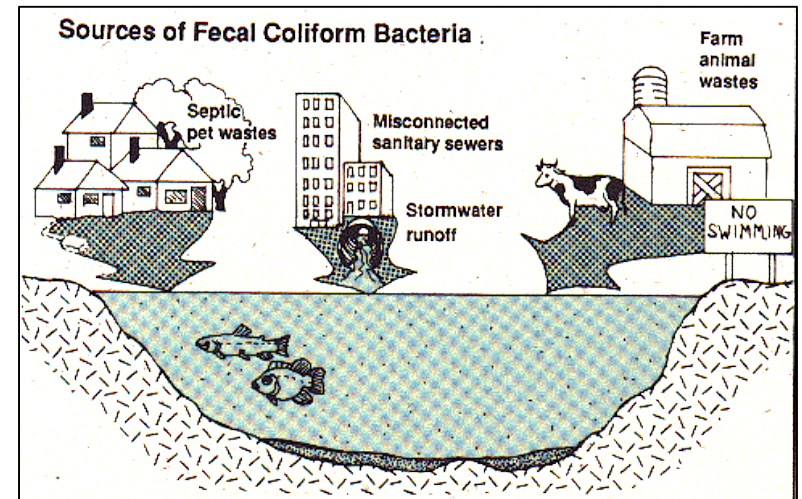
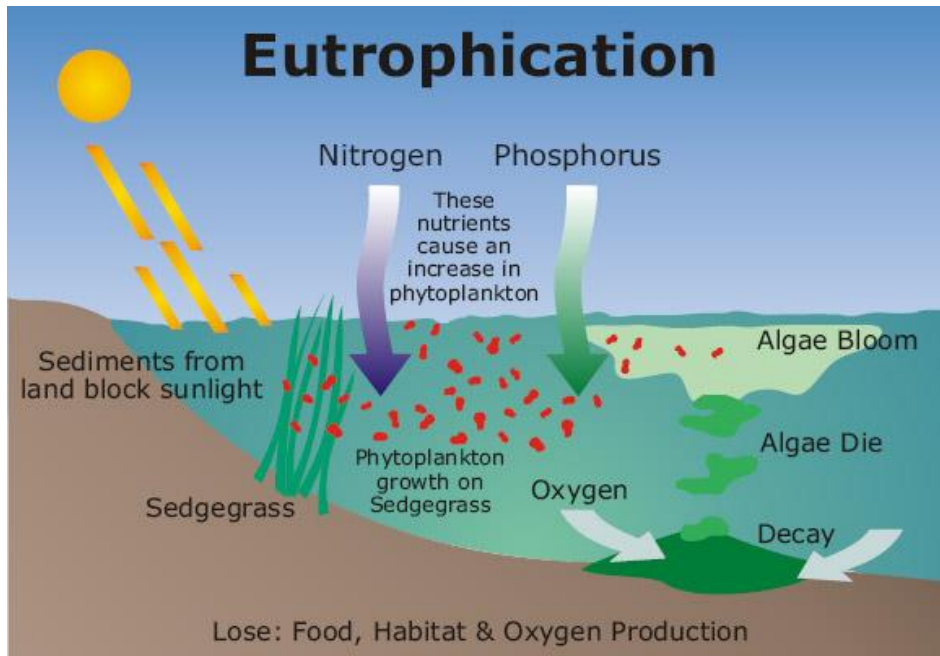
## Issues and Observations

Ballston Lake Improvement Association

August 11, 2014

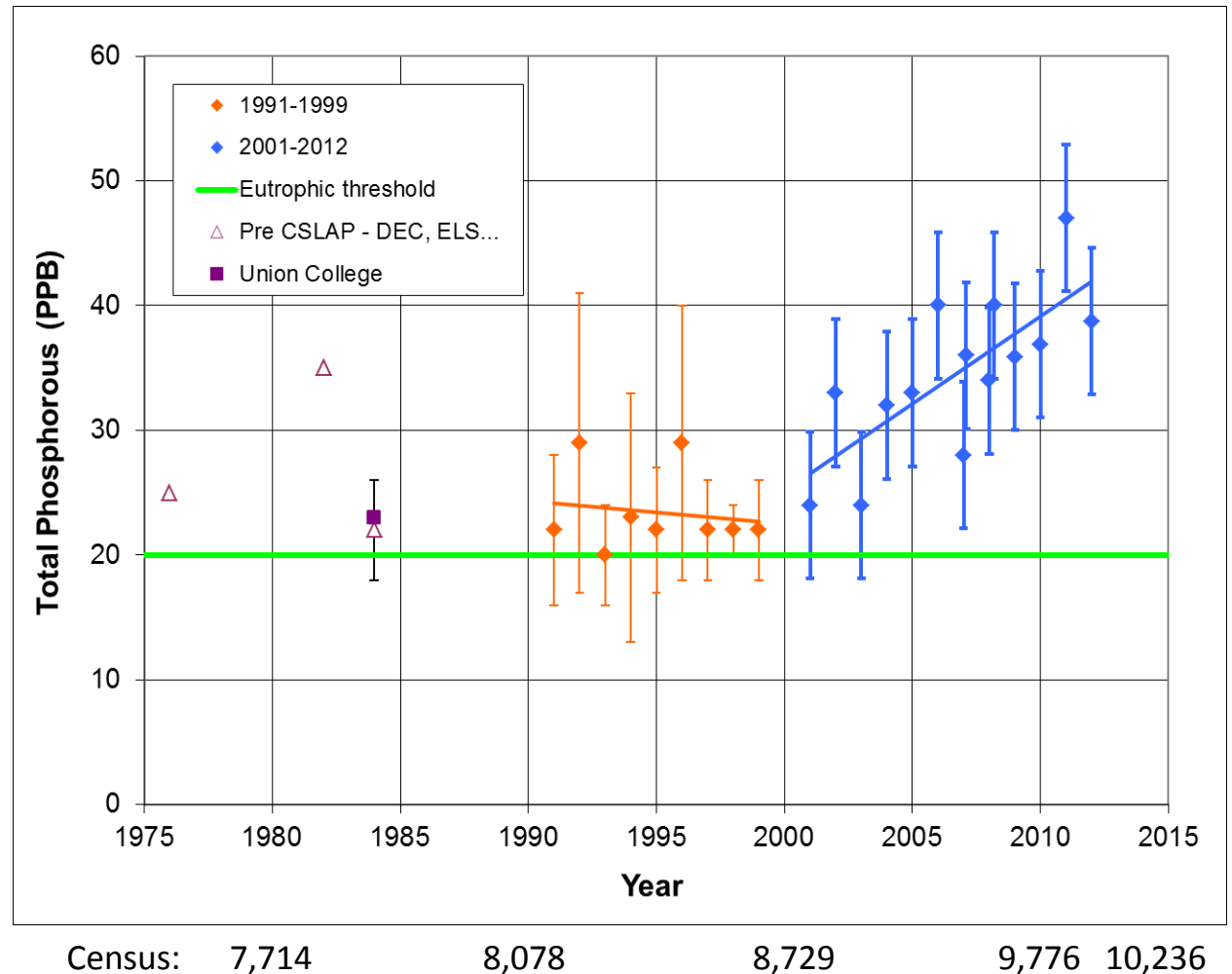
# Threats to Ballston Lake

- Excessive Phosphorus
  - Storm water Runoff
  - Failing Septic Systems
  - Dying Lake (Eutrophic)
- Fecal Coliform
  - From Humans and Animals
  - Failing Septic Systems
  - Pathogen – Causes Sickness



# Phosphorus (P)

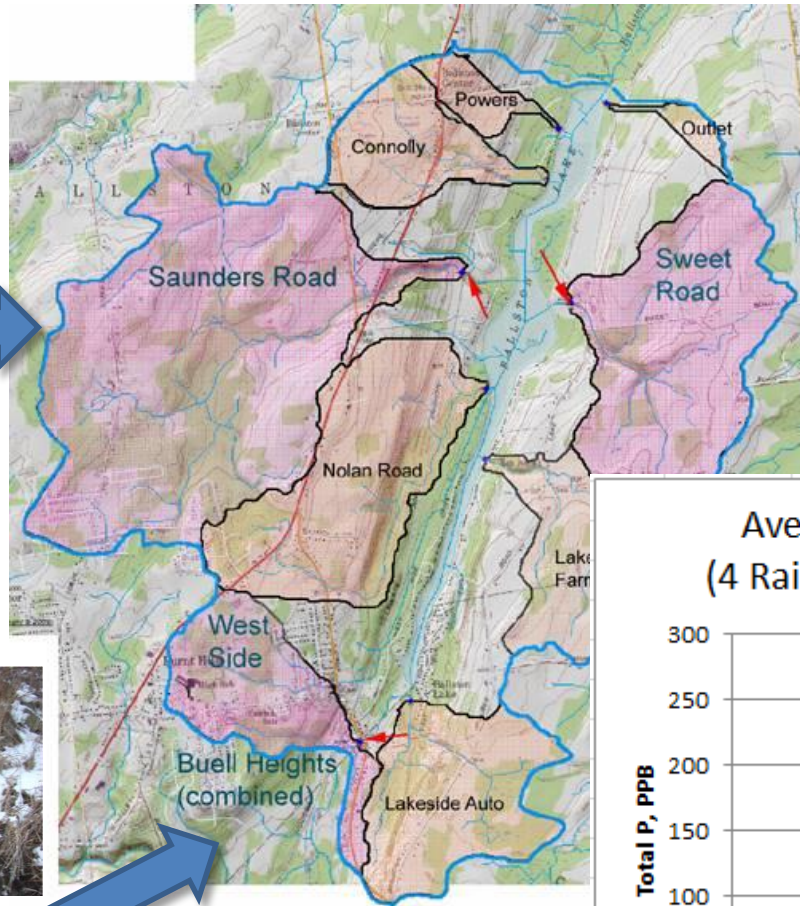
- CSLAP: 8 sampling rounds per year for 24 years
- Bender Study was initiated in 2012: 226 samples were taken and analyzed



# Three Creeks Sampled for Phosphorus During Seven Significant Storms in 2012



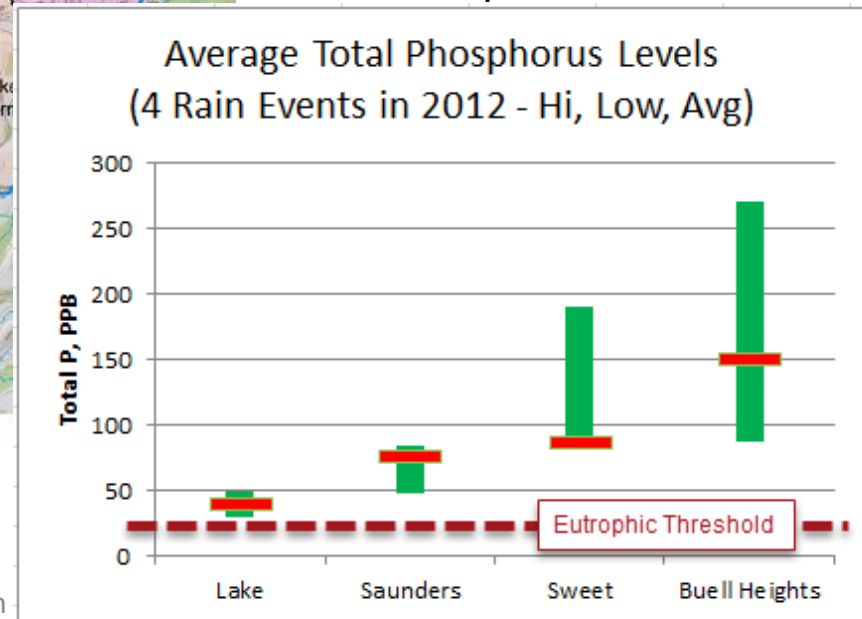
Relatively Undeveloped



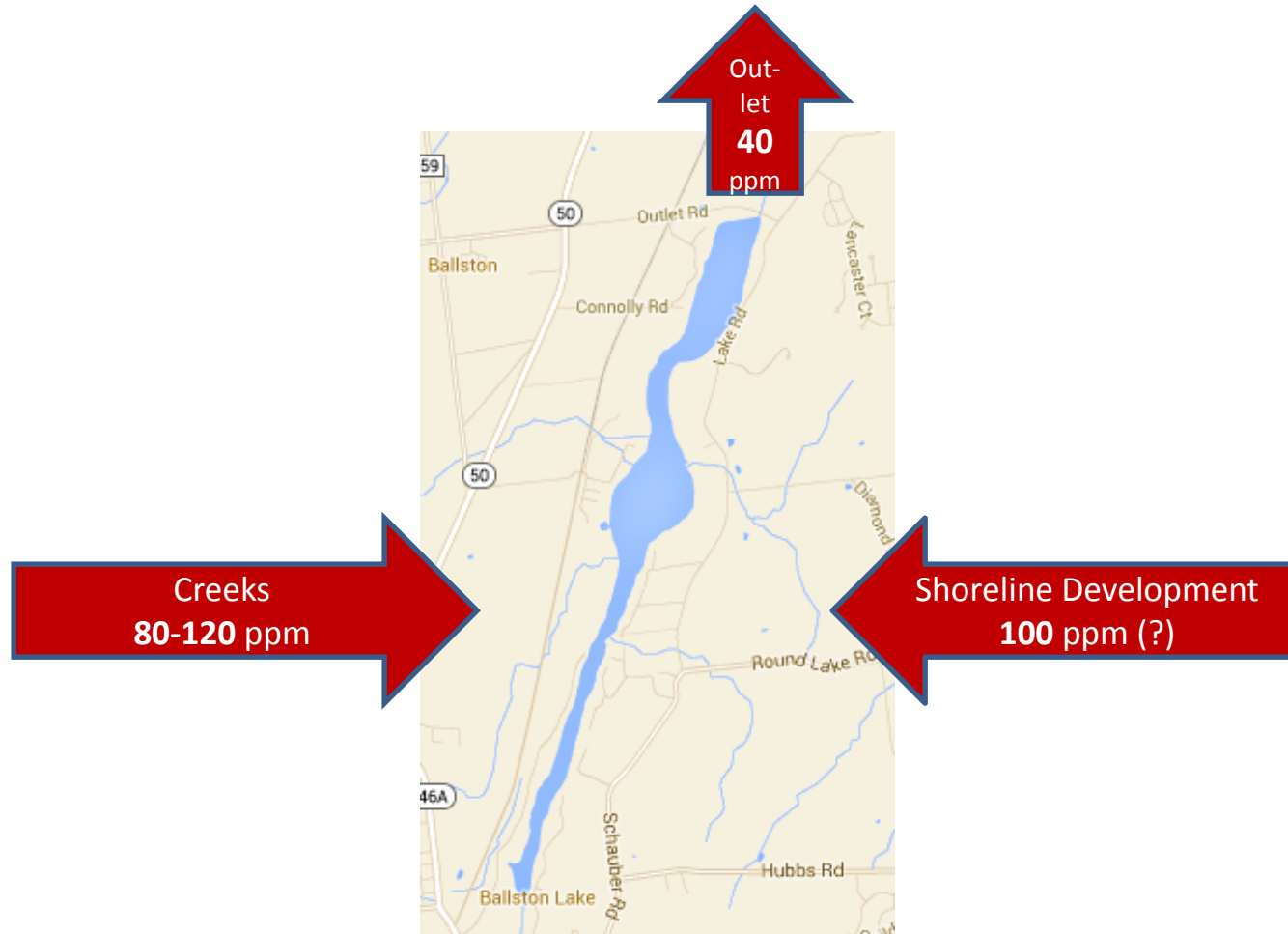
Slated for Future Development



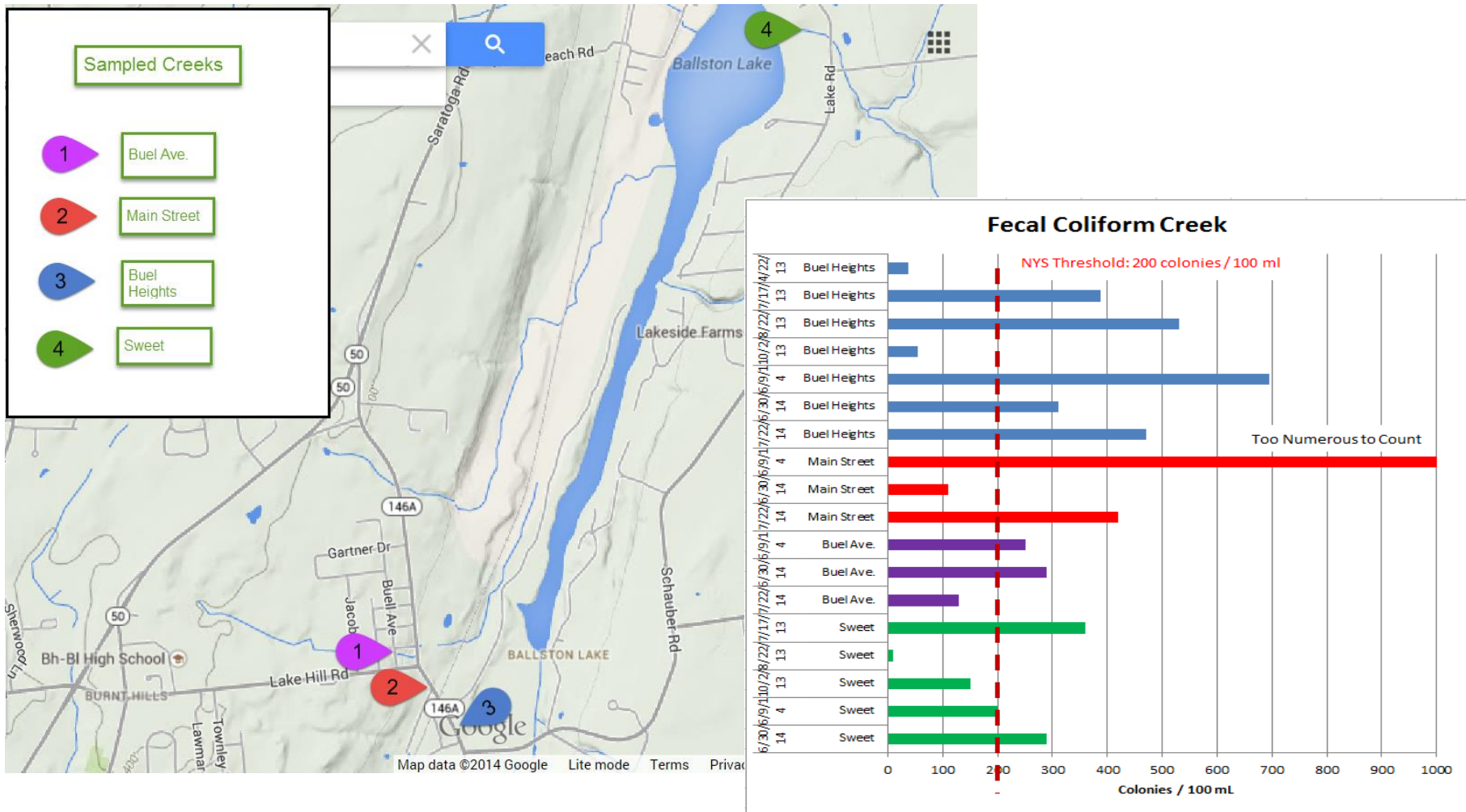
Heavily Developed



# Approximately 5 Times More Phosphorus Enters Ballston Lake Than Exits



# Fecal Coliform Measurements in Tributary Creeks



## Regional Planning Commission, 2001 Findings...

“The USDA soil survey and the experience of the State Health Department representatives indicate that the spoils in the watershed are not suitable for standard septic systems”

“Since, based on soil classifications nearly all of the land within the watershed has severe septic tank absorption concerns, failing septic systems are a serious water quality and health threat”

“The most common solution to the septic problems would be the extension of sewer service to the watershed”

## C.T. Male, 2005 Findings ...

“Ballston Lake and its watershed are underlain with glacial till and impervious bedrock, while the soils have a wide variety of characteristics, most of which impede proper septic system function”

“The soils within the watershed tend to have high ground water tables; many parcels have groundwater levels of from 6” to 2’ below the surface. When the groundwater table is this high conventional septic systems will not function properly.”

“The potential for failing septic systems is a serious water quality and health threat”



# 2012 NY State List of Impaired Water Bodies ...

New York State

Final 2012 Section 303(d) List

July 2012

Water Index Number	Waterbody Name (WI/PWL ID)	County	Type	Class	Cause/Pollutant	Source	Year
<b>Part 1 - Individual Waterbody Segments with Impairment Requiring TMDL Development (con't)</b>							
<u>Upper Hudson River Drainage Basin</u>							
H-260- 6	Dwaas Kill and tribs (1101-0007)	Saratoga	River	C(T)	Phosphorus	Urban Runoff, Constr.	2006
H-260- 6	Dwaas Kill and tribs (1101-0007)	Saratoga	River	C(T)	Silt/Sediment	Urban Runoff, Constr.	2006
<b>H-260-P1089- 3-P1090</b>	<b>Ballston Lake (1101-0036)</b>	<b>Saratoga</b>	<b>Lake</b>	<b>A</b>	<b>Phosphorus</b>	<b>Urb/Sorm, Erosion, OWTS</b>	<b>2012</b>
H-299-P27-13- 1-P30-	Tribs to Lake Lonely (1101-0001)	Saratoga	River	C	Phosphorus	Municipal, Urb/Storm	2006
H-299-P27-13- 1-P30-	Tribs to Lake Lonely (1101-0001)	Saratoga	River	C	Oxygen Demand <sup>1</sup>	Municipal, Urb/Storm	2006
H-299-P27-13- 1-P30-	Tribs to Lake Lonely (1101-0001)	Saratoga	River	C	Pathogens	Municipal, Urb/Storm	2006

*Threatened* – A body of water that is expected to be impaired within two years.

*Impaired* – A body of water that does not meet water quality standards even after pollution controls have been put in place.

*TMDL* – Total Maximum Daily Load - a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

# Ballston Lake is an Asset to the Entire Community

- The Lake has been studied intensely for over 20 years
- Hundreds of samples taken and verified by professionals
- Water Quality Degradation is Indisputable
- BLIA supports immediate action to improve water quality in Ballston Lake that will support businesses, visitors and recreation.

