

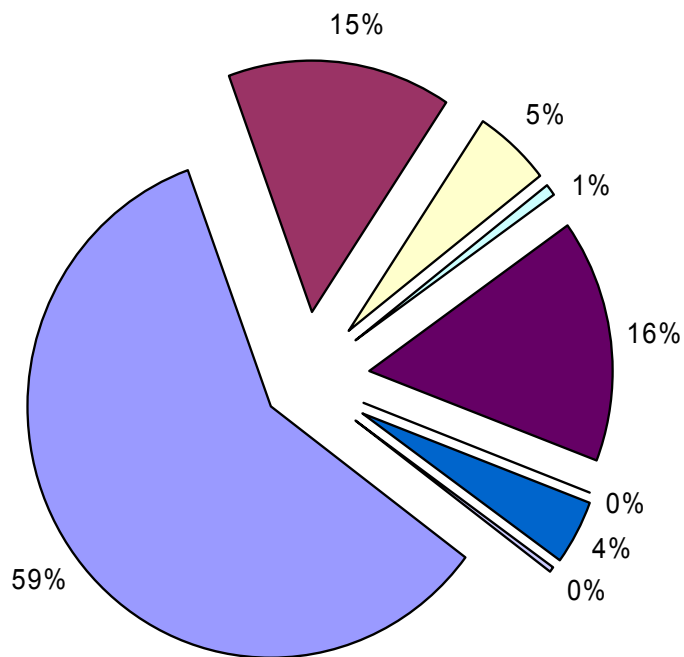
Lake Murray Rebalancing

November 8, 2007

By Ron Ahle

L&LM TWC

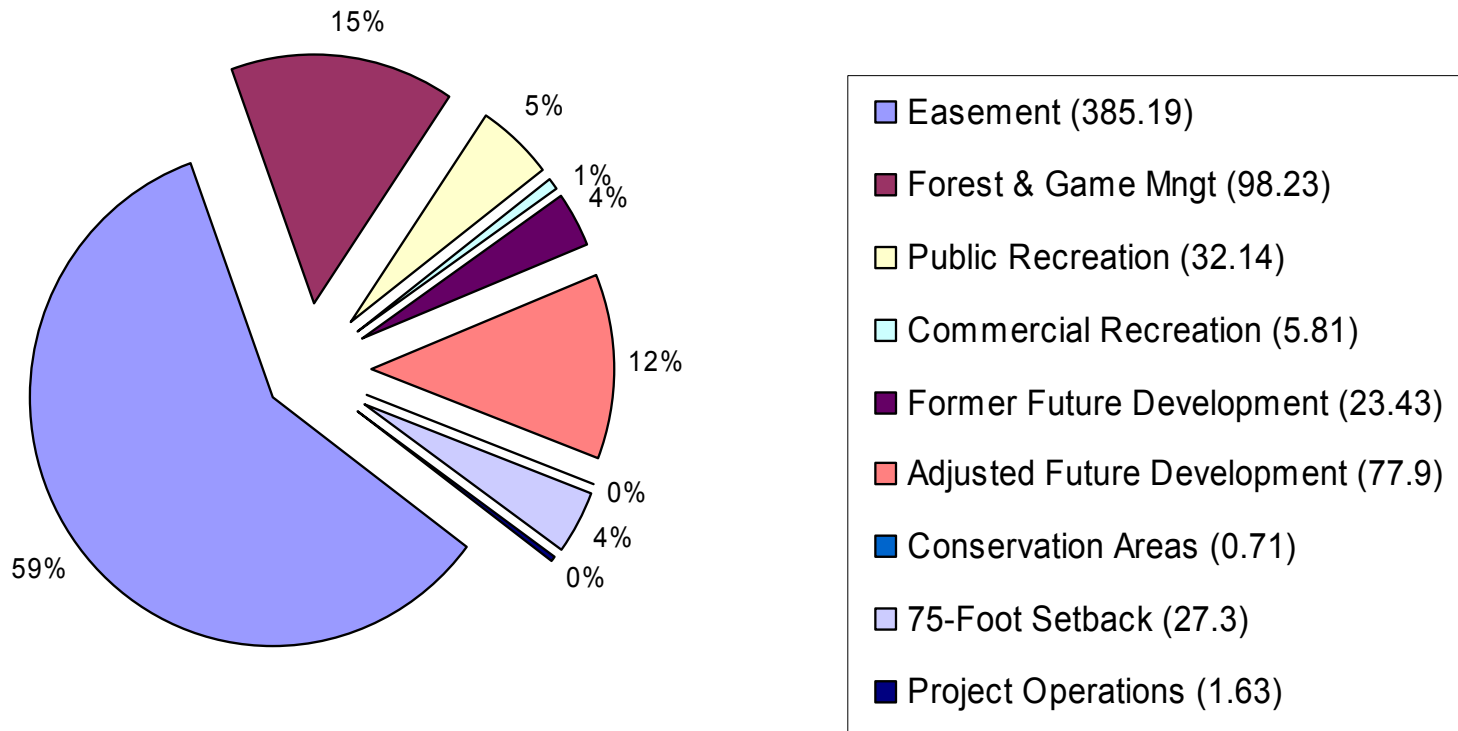
Shoreline Classification 2006



- Easement (385.19)
- Forest & Game Mngt (98.23)
- Public Recreation (32.14)
- Commercial Recreation (5.81)
- Future Development (101.33)
- Conservation Areas (0.71)
- 75-Foot Setback (27.3)
- Project Operations (1.63)

Total Shoreline = 652.34 miles

Shoreline Classification 2007



Total Shoreline = 652.34 miles

SCE&G 2006 (Future Development adjusted according to 2007 L&LM study)

* “Former Future Development” includes lands that were sold, approved for sale, or omitted.

Treatment of Future Development Tracts

- 344 total computer assigned tracks (348 were presented but several of the tracts were overlaps resulting in reducing the number to 344)
- 50 tracts omitted due to ownership issues and location
- 96 tracts were not scored due to low resource value and time constraints
- 7 tracts were scored even though they were approved for sale or lease
- 191 tracks were scored, 79 tracts were placed into 29 groups and scored collectively. The final result was 141 scores.

Resource Value Factors

Fish spawning and nursery habitat

The relative abundance of this type habitat will be used to evaluate this criterion. Fish spawning and nursery habitat is commonly associated with elevation 354' and higher.

Length of shoreline

The logic for this criterion is the longer the shoreline the higher the natural resource value.

Mean width of fringeland

The logic for this criterion is the wider the fringeland the higher the natural resource value. Consideration will be given to habitat quality from the 358 elevation to the 360 elevation.

Waterfowl hunting opportunity

This factor evaluates the amount and quality of near shore waterfowl habitat and the shooting restrictions pertinent to each County. If most or all of the fringeland shoreline is available for hunting and suitable habitat exists, a best ranking is given.

Regional importance

This factor evaluates the fringeland resource value based on regional land uses. For example, a small tract surrounded by development would have a low rating while a small track connecting two conservation areas would have a high rating.

Land Use

Land use, from a natural resource perspective, is reflected in the amount of “natural habitat” present on a given fringeland tract. The scoring criterion for this factor is based on the more natural cover the better.

Resource Value Factors

Recreational values

This factor looks at fringeland from a public recreation perspective with an emphasis on low impact recreation such as hiking, birding, fishing and picnicking. Considerations in evaluating this factor include land-based accessibility; shore fishing opportunities, proximity to other recreational areas, trail linkage and length, and wildlife viewing potential.

Adjacency

This factor looks at adjacent land use with the idea that building upon adjacent natural areas is more desirable and establishing natural areas adjacent to other lands uses is less desirable.

Environmentally sensitive areas including conservation areas

This factor evaluates the amount of environmentally sensitive areas and conservation areas associated with future development fringeland. The relative abundance of this type habitat will be used to evaluate this criterion.

Unique habitats and Threatened and Endangered Species

This factor evaluates the amount of habitat for threatened and endangered species and recognizes known occurrences. If the tract has suitable habitat with known occurrences, it is given the highest ranking.

Terrestrial Wildlife

Acreage of a tract relates directly to resource value for terrestrial wildlife. Therefore, tract size will be the criteria to measure significance for terrestrial wildlife

Scoring Criteria

- **Fish spawning & nursery habitat**
 - < 10% ----- poor (1)
 - 10% to 30% -----good (3)
 - > 30% -----best (5)
- **Length of shoreline**
 - < 300 feet -----moderate (1)
 - 300' to 1000' -----good (3)
 - >1000 feet -----best (5)
- **Mean width of fringeland**
 - < 100 feet -----moderate (1)
 - 100' to 250' -----good (3)
 - >250 feet -----best (5)
- **Waterfowl hunting opportunity**
 - Little or None -----poor (1)
 - Partial -----moderate (3)
 - Good -----best (5)
- **Regional importance**
 - Low -----(1)
 - Moderate -----(3)
 - High -----(5)
- **Land Use**
 - < 25% natural -----moderate (1)
 - 25% to 75% natural --good (3)
 - 100% natural -----best (5)
- **Recreational values**
 - Limited -----moderate (1)
 - Partially limited -----good (3)
 - Unlimited -----best (5)
- **Adjacency**
 - Isolated----- (1)
 - Connected on one side---(3)
 - Connected on both sides--(5)

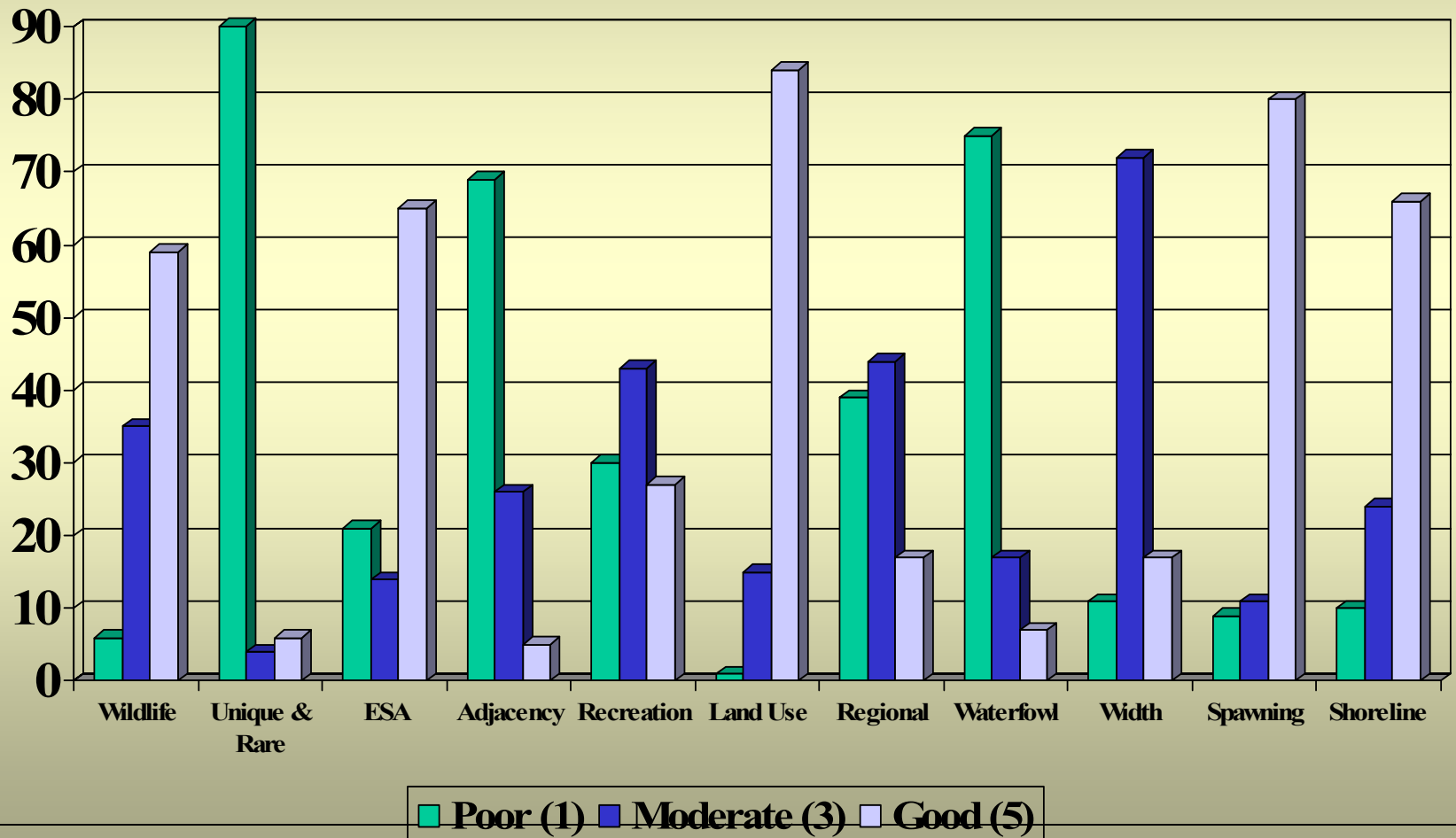
Scoring Criteria

- **Environmentally sensitive areas including conservation areas**
 - < 10% ----- poor (1)
 - 10% to 30% -----good (3)
 - > 30% -----best (5)
- **Unique habitats and Threatened and Endangered Species**
 - Poor habitat W/ No records -----poor (1)
 - < 5% unique -----moderate (1)
 - Suitable habitat w/ no records----good (3)
 - 5% to 20% unique -----good (3)
 - Suitable habitat w/ known occurrences -- best (5)
 - > 20% unique -----best (5)
- **Terrestrial Wildlife**
 - < 1 acre – mod (1)
 - 1-5 acres – good (3)
 - >5 acres - best (5)

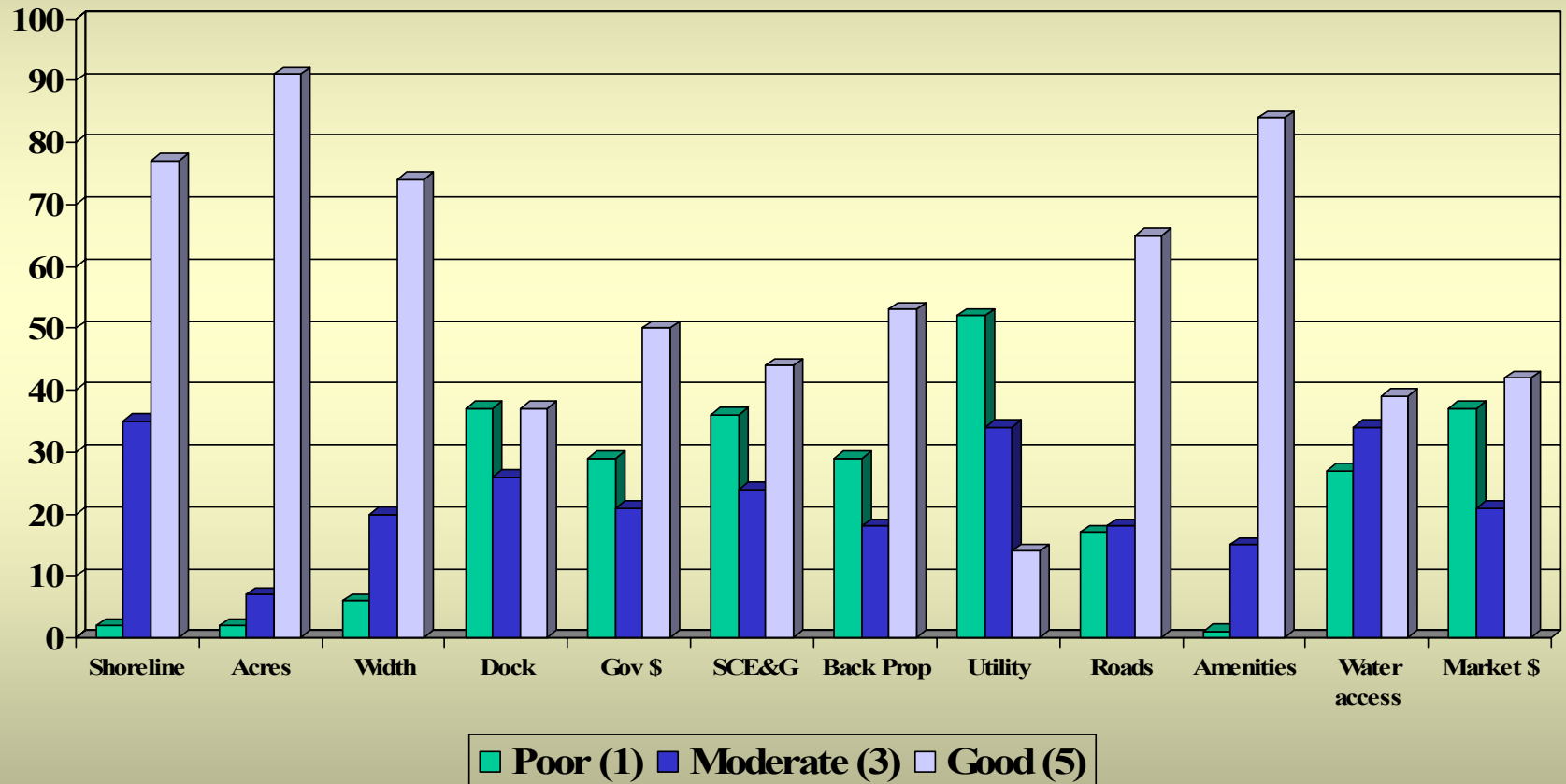
Ranking

- Ranking is based on scores stratified into three groups with the high ranking scores in the top third, good ranking scores in the middle third, and moderate ranking scores in the bottom third. Equal distribution was not possible due to the large number of tracks that scored 39. These were placed in the good category.
- Scores ranged from a low of 17 to a high of 53.
- High ranking scores were >39
- Good ranking scores were from 31-39
- Moderate ranking scores were <31

Comparison of Resource Value

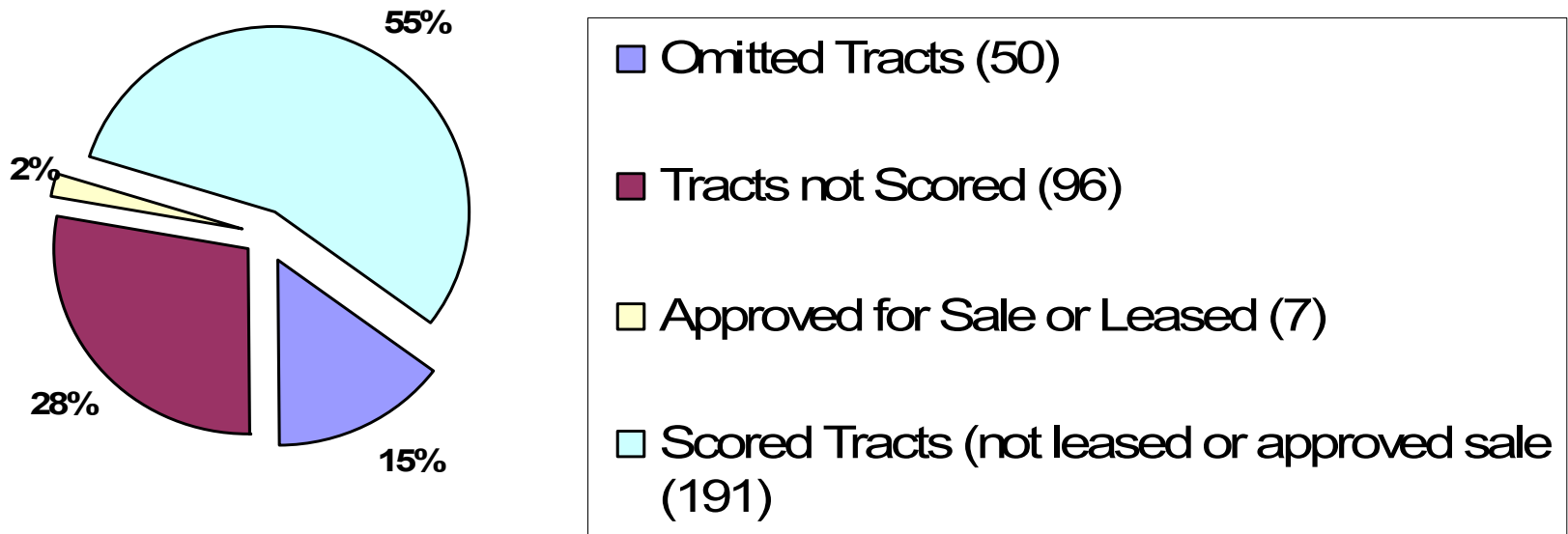


Comparison of Economic Value



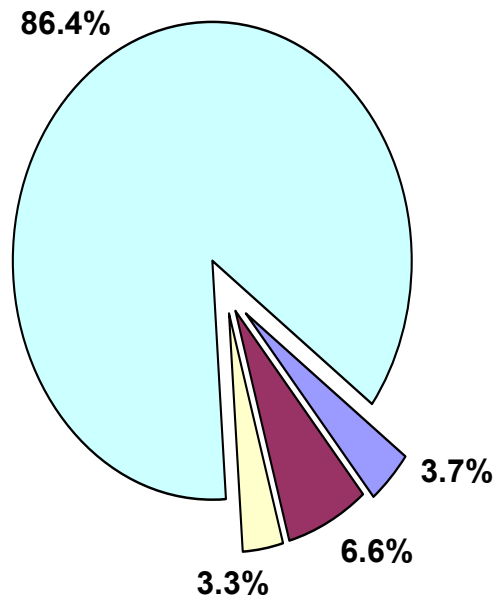
Future Development Tracts

Number of Individual Tracts



Adjusted Total Number of Tracts = 294 after removal of omitted tracks.

Future Development Tracts Acreage

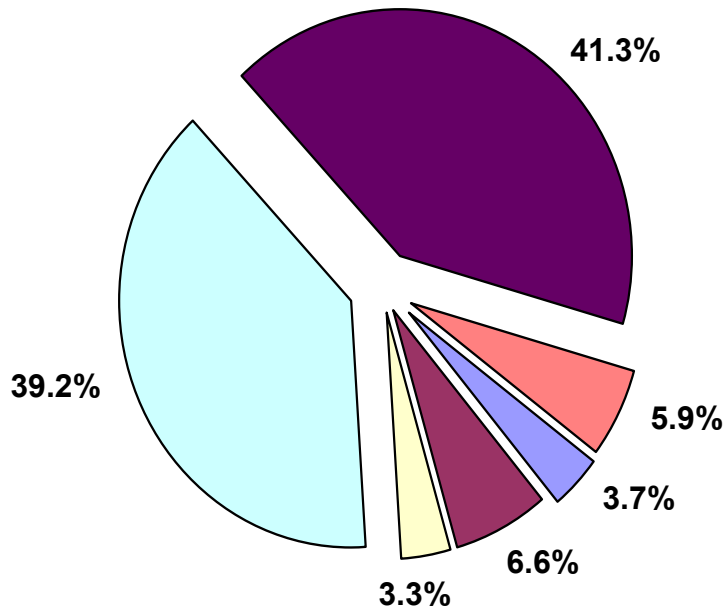


- Omitted Tracts (70 acres)
- Tracts not Scored (123 acres)
- Approved for Sale or Leased (61 acres)
- Scored Tracts (not leased or approved sale (1615 acres)

Total Acreage = 1869 acres

Future Development Tracts

Natural Resource Value Acreage



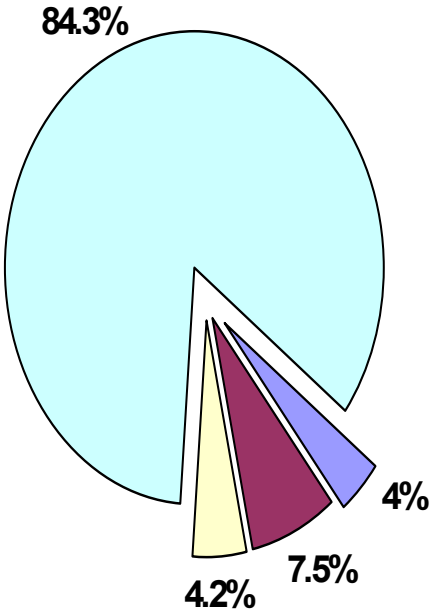
Total Acreage = 1869 acres



(Good – High) Resource Acreage = 1504 acres

Future Development Tracts

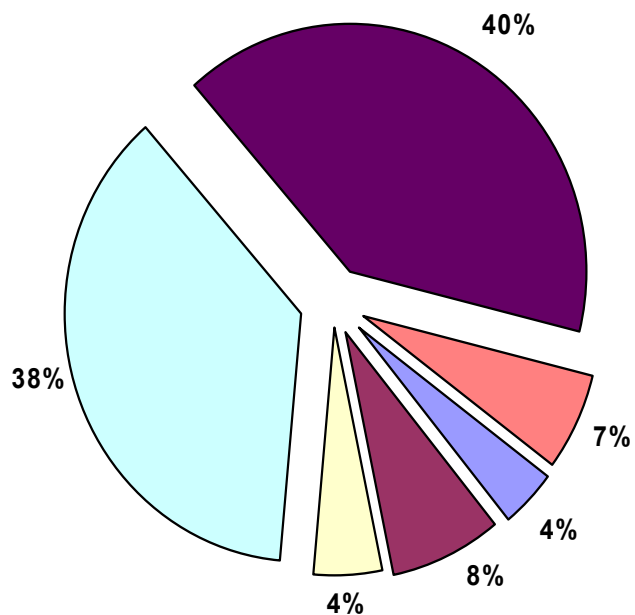
Miles of Shoreline



- Omitted Tracts (3.68 miles)
- Tracts not Scored (6.94 miles)
- Approved for Sale or Leased (3.9 miles)
- Scored Tracts (not leased or approved sale (77.9 miles)

Total Shoreline Miles = 92.4 miles

Future Development Tracts Ranked Miles of Shoreline



Total Shoreline Miles = 92.4 miles

(Good – High) Natural Resource Shoreline Miles = 71.93 miles

- Omitted Tracts (3.68 miles)
- Tracts not Scored (6.94 miles)
- Approved for Sale or Leased (4.2 miles)
- High Resource Value >39 (34.66 miles)
- Good Resource Value 31-39 (37.27 miles)
- Moderate Resource Value < 31 (5.98 miles)

Summary

- Currently, only 15% of Lake Murray fringelands is in a classification (Forest and Game Management) that will not allow any form of development. A small amount of additional lands with no development will be provided by conservation areas.
- 294 future development tracks were evaluated, 198 were scored
- Of the 198 scored, 7 have been sold or leased, 79 were combined into 29 groups, 141 scores were made.
- Most tracks had abundant ESA, were naturally forested, and were of sufficient size to provide habitat. Also noted was the limited amounts of waterfowl areas and unique habitats.
- Conclusion: Rebalancing land use to protect natural resources is well justified.

Recommendations



- A portion of the tracts with high natural resource value should be declared ESA and left undisturbed for the life of the license.
- All remaining tracts that were scored for natural resources will remain natural and in the project with the possible exception of public recreation and very limited private lake access.
- All tracts that were not scored will remain in the future development classification.

The End