

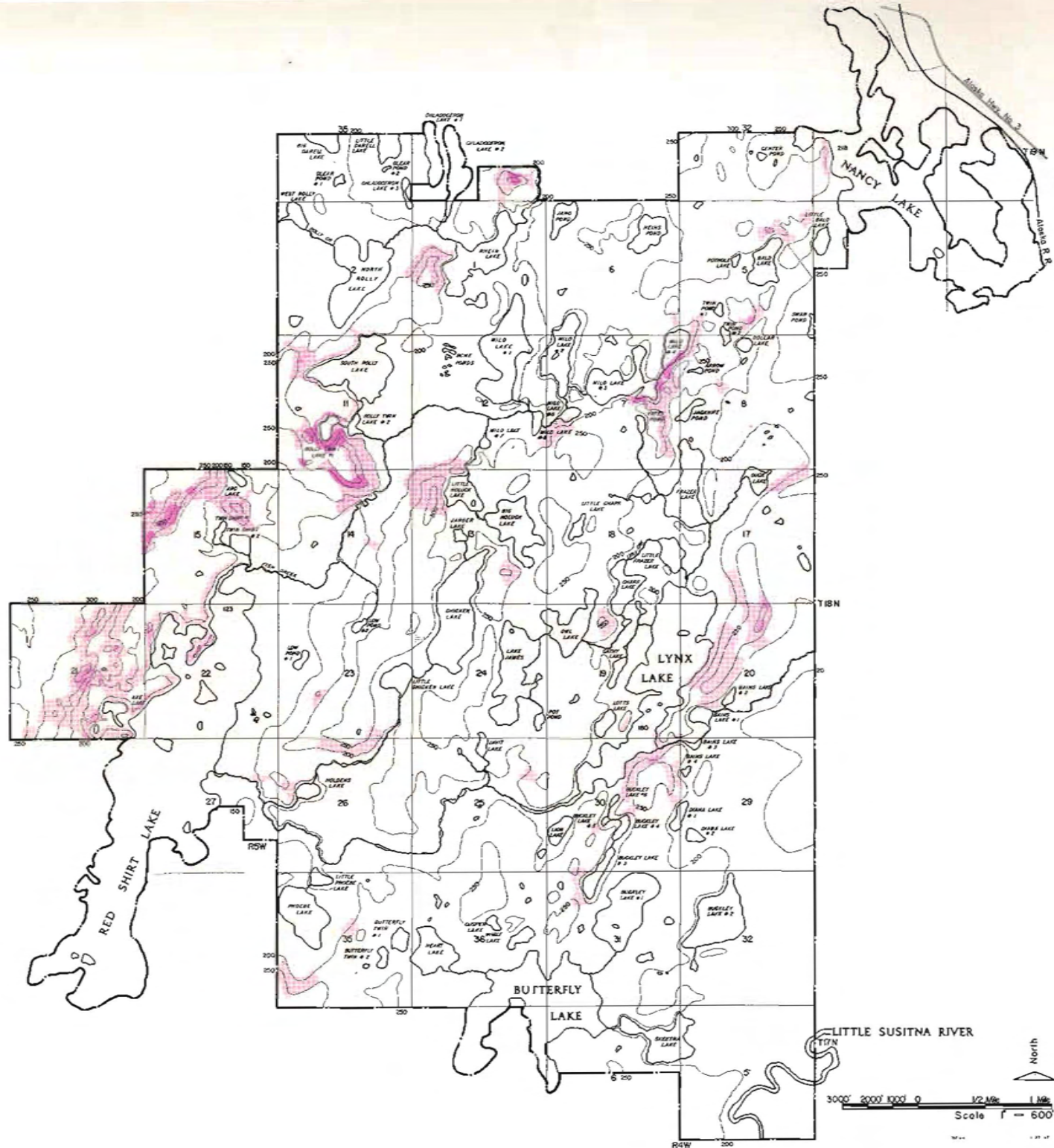


SWAMPS

Physiographically of equal importance to the lakes in the park landscape is the large part of the area in swamp. In 205 distinct areas, swamp occupies almost as much area as water -- 4,335 acres. Like the lakes, they range in size from tiny bags of little significance to narrow shore line strips bordering most streams and lakes on up to a very large one of 1,642 acres (over 2-1/2 square miles). Extending along the eastern boundary for two and one-half miles, this swamp protrudes over a mile into the park at its widest point.

Expensive to traverse with road or to locate even foot or horse trail on, the large swamp segment is especially important because it must be respected -- and **avoided**. Actually the swamp has great aesthetic value -- as an attractive open feature of the landscape. It enables views that would not exist were the terrain wholly wooded. Also it has major value as the habitat of special wildlife -- moose and beaver, for example, that might not otherwise be found in the area--wildlife that will greatly increase the enjoyment of park visitors.

It is interesting that if the water and swamp are deducted from total acreage, there remains only 10,124 acres -- a little less than half of the total suitable for location of "dry land" facilities.





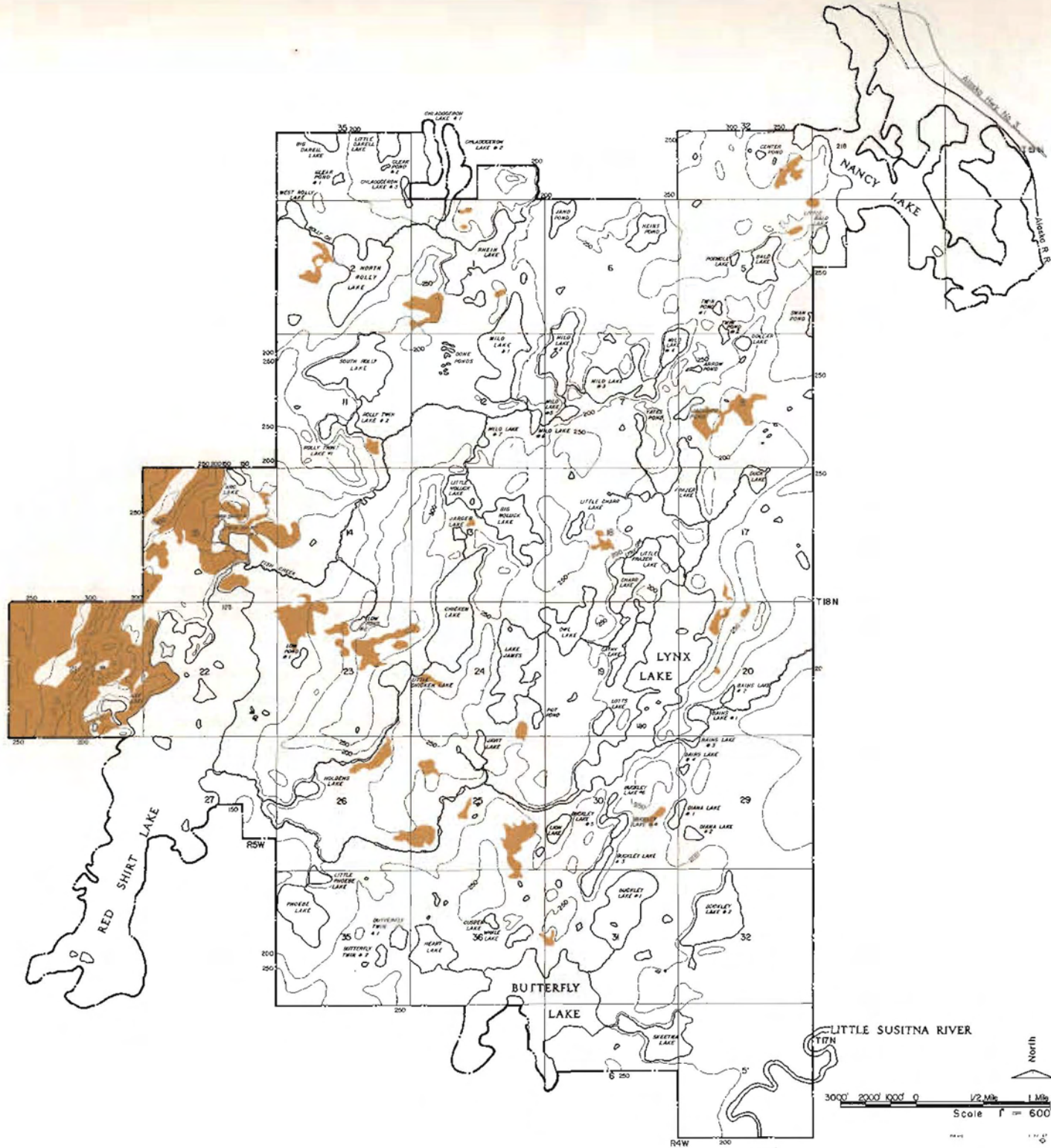
LAND SLOPE

There is still another limitation. It is important to determine "degree of land slope" partly because of erosion factors and partly because construction costs increase in direct relation to steepness of terrain.

Since the Noney Lake topsoil is so shallow (12 inches) as to be highly subject to erosion -- a further planning criterion becomes necessary -- that any facilities that concentrate people to the extent of wearing out the ground surface, but especially picnic and camp grounds, - must be located on terrain with a slope of less than 10:1. (1 foot vertical rise to 10 feet horizontally).

As the map opposite illustrates, the glacial moraines vary tremendously in ratio of side slope, with much area greater than 10:1. The total of slope 10:1 or steeper is 1,219 acres, with 137 acres of this 4:1 or steeper.

While serving to restrict the location of camp and picnic grounds, this particular part of the land analysis series, with its indication of 4:1 or steeper slopes, has the great value of revealing potential area suited to skiing, tobogganing and sledding -- activities where steep slopes are a must.





OPEN, DRY AREAS

One final analysis is conducted -- the locating of areas that are open, yet dry, as opposed to swamp. It is particularly important, to scan the aerial photographs closely for these because a large open site for a golf course and an open site for the skiing-sledding-tobogganing slopes are needed. Not only will the expense of clearing (with consequent loss of topsoil) be unnecessary but the unnatural clearing of large wooded areas will be avoided also. As the map opposite shows, there are 1200 acres of open dry terrain. 867 acres of this lies on steep slopes west and north-west of Red Shirt Lake - an area that is ideal for the winter sports complex but not far the golf course. (Too far distant from the lodge). By this color coding method which pinpoints some areas and warns away from others, the Land Analysis begins to reveal what areas are useable for what purposes.

It is immediately obvious that the terrain is thoroughly chapped up by the lakes, swamp and steep slopes to the extent that useable areas are quite small as well as widely dispersed. Though this makes for an interesting and varied landscape, it distinctly narrows the choice of sites for almost all activities.