



AMENDED OFFICIAL STATE MAP OF THE EVERGLADES, ADOPTED
IN 1907.

The following additional action regarding the official State map of the Everglades was taken by the Trustees of the Internal Improvement Fund as shown by their minutes:

TALLAHASSEE, FLA., June 10, 1907—3 p. m.

Hon. B. E. McLin, commissioner of agriculture, having prepared an amended map of the lands embraced in United States patent No. 137, in accordance with the request of the Trustees, and the same having been presented, examined, and approved, it was

Resolved, That the amended official map of the Everglades, covering the lands embraced in United States patent No. 137, prepared under the direction of the Hon. B. E. McLin, commissioner of agriculture, be, and the same is hereby, adopted as official by the Trustees of the Internal Improvement Fund of the State of Florida, on this, the 10th day of June, A. D. 1907; and,

Resolved further, That the amended map be entered of record on a separate page of the minute book of the Trustees of the Internal Improvement Fund, and that a copy of said map, duly certified by the secretary of the Trustees, be filed in the office of the commissioner of agriculture.

(Minutes of the Trustees of the Internal Improvement Fund, vol. 7, pp. 66-67.)

TALLAHASSEE, FLA., June 14, 1907.

The following resolutions were adopted:

Resolved by the Trustees of the Internal Improvement Fund of the State of Florida, That the townships, ranges, and sections of the official map of the Everglades adopted by the Trustees under date of January 2, 1905, and as amended by resolution of said Trustees of June 10, 1907, embracing the lands in the United States patent No. 137, be, and the same are hereby, adopted and ratified as the townships, ranges, and sections of said map, which townships, ranges, and sections, as the same appear to be designated upon said official map of the Everglades, were so designated and determined by projecting on said map the township, range, and section lines of the original United States survey as the same appear on said map, and that the sections indicated on said official map of the Everglades, as adopted by the Trustees of the Internal Improvement Fund of the State of Florida, as aforesaid, be numbered similarly and under the same plan and systems as sections are numbered under the township, range, and section system adopted by the United States, and of the same force and effect, beginning with section 1 and continuing to section 36, inclusive, fractional townships to be numbered under the same system, being designated by such numbers as will make them uniform with the system of the United States."

This resolution to be written on the official plats or maps and signed by the Trustees, where such official plat is furnished by or under the direction of the Trustees.

(Minutes of the Trustees of the Internal Improvement Fund, vol. 7, pp. 70-71.)

OWNERSHIP OF THE EVERGLADES.

[Extract from Annual Report of General Counsel of the Internal Improvement Fund of the State of Florida for the year 1908-9, p. 29.]

The question of the ultimate ownership of the lands was definitely answered in the plan for the adjustment and settlement of the claims of prior land grants and conveyances by railroad land-grant claimants to the State Board of Education of a sufficient acreage of lands by

deeds and assignments of certificates, reservations, etc., embracing and covering the remaining 2,000,000 acres of lands now owned by the fund, which had previously been granted as the residuary interest in said lands by legislatures, perhaps improvidently, but doubtless in good faith, which is the final disposition of the whole landed interest, both the main title under the grant of 1855 to the Trustees, and the residuary interest remaining in the State as beneficiary by subsequent legislatures, and by their legal transfers and conveyances vesting the residuary interest in the State Board of Education, and thereby removes the question from further claims or legislative disposition.

PRESENT ACREAGE IN THE FUND.

The total acreage now on hand in the fund is approximately 2,000,000 acres, subject to sale, management, and control by the Trustees of the Internal Improvement Fund for purposes expressed in the act of 1855, the main purpose being that of drainage and reclamation. The State Board of Education of Florida holds conveyances completely including the entire acreage that shall remain in the fund after the purposes thereof have been accomplished.

CONCERNING EVERGLADES LAND.

[Extracts from pamphlet prepared by the Florida Commissioner of Agriculture under direction of the Trustees of the Internal Improvement Fund.]

The Everglades district of Florida having been brought so prominently before the public since the Trustees of the Internal Improvement Fund commenced the work of drainage in said territory, we find it impossible to answer by letter the many applications for general information concerning this territory and the work being done by the Trustees. To meet these conditions the best we can, the Trustees directed the commissioner of agriculture to prepare a printed circular or pamphlet covering the history and present status of the territory and work being done in the Everglades or "drainage district."

The following compiled data is submitted in as condensed form as the subject will admit of.¹ * * *

While doubtless the Everglade basin has been to a large extent filled up by the enormous vegetable growth, the drainage by the various streams, whose heads or rapids are gradually working farther into the body of the Glades, has had much to do with this apparent filling up. The evidence is that the drainage has had more effect on the apparent altitude of the surface than has the filling up.

Large areas covering many square miles which but a few years ago were marshes covered with saw grass and rushes are now open meadows, dry all seasons, excepting the rainy months, affording pasture for many thousand heads of cattle. The fall or rapids at the heads of all streams running from the Glades have evidently receded toward the center of the Glades and Lake Okeechobee several miles since the report quoted was made.

Excepting a few reports by surveyors and explorers little new information as to the Everglades was procured until 1881, when the State

¹ Most of the matter originally published in this paper is found elsewhere in this collection of documents.

of Florida contracted with the late Hamilton Disston to drain a large area of lands bordering Lake Okeechobee and including part of the Glades. This company, known generally as the Okeechobee Drainage Co., or the Disston Drainage Co., had numerous surveys and levels made by its engineers. In 1880-1882 a line of levels was made by Gen. Gillmore, under direction of the United States Senate, to discover a practical route for a ship canal across the peninsula of Florida. These and other surveys, by Col. Charles Hopkins, Maj. Wirts, V. P. Keller, J. W. Newman, and others, established the altitude of Lake Okeechobee, "the head of the Glades," at 21 to 23 feet above tide level, the difference in levels being accounted for by the different seasons at which the surveys were made. A reconnoissance under Col. Hopkins was made during 1883 from Lake Okeechobee to Shark River; another expedition, under James E. Ingraham, across the Glades in 1892, occupying 22 days in crossing. The reports of these and others confirm the early reports by the officers of the United States Army and Navy, quoted as to character of soil, depth of water, and extreme fertility of the region. The report of Col. James M. Creamer, chief engineer of the Okeechobee Drainage Co., made in 1886, accompanied by detailed maps and profiles, states:

As before noted, the surface of this soil is at times exposed, and it is only during or subsequent to a heavy rainy season that it is possible to penetrate with a light skiff, and then advantage must be taken of the natural drains of this vast area. If there was an absence of the dense saw grass no difficulty would be experienced in traversing this country in any direction. A 4-foot reduction of the surface of the waters of this region would be sufficient for the purpose of cultivation, etc.

Levels and measurements taken at Lake Worth establish the surface of the fresh water of the Everglades to be 10½ feet above the tidewaters of the Atlantic, and that a canal 1,100 feet long would afford relief for a vast area westward. Examinations at Miami and other points disclose the presence of this rocky ridge, whose crest was elevated above the normal level of the waters of the interior. It would be perfectly feasible to cut this rim at frequent intervals and permit the impounded water to flow into the Gulf or Atlantic. This would result in exposing great tracts of soil, now practically valueless. From these points drainage canals could be projected into the interior. * * *

HEALTHFULNESS OF THE EVERGLADES.

[By R. E. Rose, Florida State chemist.]

The healthfulness of a region is of the utmost importance to any enterprise, and especially is this true when the operatives must become permanent residents. It can be positively stated that the reclaimed lands of the Kissimmee Valley are free from malaria. The employees of the drainage company were white men exclusively. These men were recruited from all parts of the country. Many of them entered into the service of the company before they became acclimated. During a period of over 11 years the company never employed a physician nor lost an employee from death; never did any of the men leave the service of the company from the fact they could not stand the climate. Malaria and chills are absolutely unknown.

ANALYSIS OF MUCK.

The following analysis of muck will be found interesting to those familiar with the subject of sugar culture:

Moisture.....	16.84
Organic matter and combined water.....	75.65
Silica and insoluble silicates.....	.91
Oxide of iron.....	1.47
Lime.....	3.17
Magnesia.....	.18

Potash.....	0.13
Soda.....	.38
Phosphoric acid.....	.18
Sulphuric acid.....	.51
Chlorine.....	.43
Nitrogen (in organic matter).....	2.17

The chemical analysis has been substantiated by practical experience. Muck lands have been found to be suitable to a great variety of crops, especially sugar cane. * * *

ANALYSIS OF SUGAR CANE.

The following is an analysis of a sample of sugar cane from an old field on an island in the Everglades, west of Miami. This analysis was made in the State laboratory, 1908, T. E. Bridges, analyst; R. E. Rose, State chemist.

M. 926.—Cane juice.

Brix.....	22.31
Baumé.....	12.60
Sucrose.....	per cent. 20.51
Invert sugar.....	do. 1.78
Solids not sugar.....	do. .02
Coefficient of purity.....	do. 91.97

From J. W. Newman, Fort Lauderdale, Fla.

EXTRACT FROM LETTER OF EX-GOV. BROWARD.

The Florida Everglades may be described as a wet prairie, being a strip of land about 150 miles long by 55 miles wide, and lying between the pine and swamp lands which have grown over two reefs of rock running parallel with each other from north to south. No rivers penetrate into the Glades beyond these rock reefs on either side and the land is very level, only about 21½ feet above the sea level, being composed chiefly of muck and sand, lying in a basin with a rock bottom. The annual rainfall over this territory averages nearly 60 inches. It has for this reason, and because this rainfall has no outlet over these reefs, been and is too wet for cultivation. The muck which overlies the sand and rock varies from about 2 feet on the edge of the Glades to a depth of 20 feet in the middle, and would average over the whole territory a depth of between 6 and 8 feet. The land is free from trees and stumps and almost free from bushes, the item of clearing being of no consideration whatever, simply requiring mowing down the grass and burning it, when the soil is ready to be tilled, as soon as the excess water is run off.

The soil, as compared with other portions of the country, taking into consideration its natural richness, location, and climate, is more valuable for agricultural purposes than any that is known, being particularly adapted to the growth of cane, cotton, Irish potatoes, celery, tomatoes, cabbage, turnips, beets, and in fact any crop will grow well on these lands except such as require a colder climate.

The few persons who have as yet cultivated Everglades land as a business have found the yield per acre very large, and prices high for their crops grown at a season when they can not be grown anywhere else in the United States.

The quantity of land now reclaimed is very small, perhaps not over 12,000 acres, but two other dredges will be put to work within a few days, and the work of reclamation will be pushed rapidly, and by the middle of the year there should be reclaimed, monthly, from 10,000 to 15,000 acres. The people living on and about this land are healthy. It is free from malaria and fevers, and it is my opinion that within a few years it will constitute one of the most valuable agricultural areas in the United States.

Four powerful dredges have been built especially for this work, and on the southern end the most difficult part of the work in cutting through solid rock has already been accomplished. The balance of the work on this route will be through sand and muck, principally the latter, which is very rich and will be wonderfully productive. The part of the canal already constructed has demonstrated the feasibility

and great value of the drainage work. Another canal will be opened by the new steel hull dredge *Miami* from the Miami River to connect with the canal from the south. The new steel hull dredge *Caloosahatchee* will open up the channel of the Caloosahatchee River on the west between Lake Okeechobee and the Gulf of Mexico, and other dredges will go south and east from Lake Okeechobee by the different routes into the Atlantic Ocean. It is the purpose of the Trustees to push the work to completion as rapidly as possible, and additional dredges will probably be built and put into commission for that purpose as the Trustees find they have means available.

You are cordially invited to visit and inspect the work already completed and to witness the operation of the powerful dredges now at work. Such inspection will convince any reasonable person of the feasibility of the plan for drainage, the magnitude of the work, and the inestimable value and utility of the canals and waterways, when completed, both for drainage and transportation purposes. The plans contemplate a continuous waterway from the Atlantic Ocean to the Gulf of Mexico, using the Caloosahatchee River on the west as a part of the route, and other streams on the east. Lateral canals of various sizes are now being built and contracted for by various property owners in the Everglades, and the cultivation of land already reclaimed is in progress.

In addition to the funds being used by the Trustees for drainage, the legislature of 1907 levied a tax of 5 cents per acre on the land in the drainage district for drainage purposes, and the United States district court for the southern district of Florida decided that the tax was legal and this decision has been sustained by the United States court of appeals.

Large tracts of lands lying in the Everglades or drainage district are owned by private individuals, companies, and corporations. The Trustees of the Internal Improvement Fund have nothing whatever to do with these companies, know nothing of their plans, methods of selling or contracting to sell their holdings. Their financial standing must be found through other channels. While we have no cause to doubt their good faith, we can not in any way indorse or recommend any private enterprise.