

THE PROBLEM OF THE EVERGLADES
AND HOW IT AFFECTS THE ENTIRE
SOUTHERN PENINSULA OF FLORIDA

The successful readjustment of the financial problems of The Everglades is a most important step in the realization of the potentialities of the area. The success achieved in this endeavor removes the last obstacle to the solution of another, and equally important, problem, namely, the physical factors. With the financial and physical problems successfully solved, many other grave problems will be automatically solved and the economic potentialities of the entire southern peninsula brought to fruition. Perhaps the extent of the many co-equal problems affected by the physical characteristics of The Everglades might have received a greater degree of public appreciation had the term conservancy or water-control been used instead of the term drainage. It would be most unfortunate if, through expediency or unforeseen emergency, some steps be taken to overcome one segment of the problem, only to aggravate other segments of the over-all problem. A prompt study, analysis and unprejudiced approach to the over-all problem can result in full protection of all interests affected; delay can only result in attempts to protect one interest at the expense, perhaps destruction, of other interests.

The Kissimmee, the Caloosahatchie and Fisheating Creek Valleys, taken as a unit, comprise probably the finest range and pasture land in the country and this area is of growing importance to animal husbandry in the State. Such area is intimately affected by the physical characteristics and problems herein discussed. As knowledge of, and plantings in, improved grasses become more general and widespread, the number of cattle which can be supported on a section of land will increase substantially. As the livestock population increases the water requirements, for both the stock and the pastures, will likewise increase. At the present time there exists an unwarranted and unnatural run-off of both surface and sub-soil waters, which condition is becoming gradually more apparent in the unnecessary and wasteful drying of the upper horizons of the soil. Such conditions are intimately associated with the problem of water control throughout the southern peninsula and, unless the basic factors are corrected, may be expected to grow progressively worse until such time as this great natural resource will be reduced to the status existing in the so-called Dust Bowl of America and in the over-rained areas comprising a large portion of many Western states.

The coastal resort and recreational areas all expect substantial increases in the number of seasonal visitors as well as in developments which will create an ever increasing number of opportunities for year-round employment, once the peace has been won. There is presently no reason to believe such expectations to be over-optimistic. The demand for domestic supplies of potable water will increase in full proportion with increasing permanent and seasonal population along the lower coasts, and the problem of sanitation will likewise become aggravated. Some

coastal cities are already experiencing trouble in meeting the water demand, and in at least one large city the problem of salt water infiltration has arisen. With a solution of the hydrographic problem of the lower peninsula will come a more than adequate supply of potable waters for a many-fold increase in coastal population, as well as the solution of the increasing serious problem of sanitation in such metropolitan areas.

The term "muck-fire" has many bad connotations not only to the permanent residents of the lower peninsula, but, of great importance to the recreational areas, even worse connotations to the average seasonal visitor. Practically all muck-fires are the result of two contributing causes - carelessness and over-drainage; the first cannot be cured other than by the careless individual himself, and dependence on such a cure is indeed a weak reed upon which to lean. The second cause, over-drainage, can be cured and will be automatically cured in the solution of the physical problems herein discussed; such cure will likewise eliminate the results of carelessness. The most serious result of these unnecessary muck-fires is the destruction of a great natural resource that was centuries in the making, and which can well take centuries to renew under presently existing conditions. The Nation is much concerned about the soil losses of the past one hundred or more years, but here in The Everglades, visible to the naked eye and most irritating and more or less injurious to the inhabitants and visitors, are presently occurring very serious soil-losses which can be prevented by the simple process of curing other pressing problems.

Throughout the Nation are many examples of the irreparable injury to the soil caused by overdrainage and loss of soil waters which are readily apparent to even the casual passer-by and those charged with the responsibility of maintaining our agricultural economy are, quite properly, deeply concerned. Today in The Everglades much of the damage (soil subsidence, loss of capillarity, etc.) is apparent only to those intimately connected with the soil, although continuation of existing conditions will, before many years have passed, make such injuries equally apparent to the casual traveler. It would indeed be most unfortunate if, through delay or unsound attempts at correction, the great national resource which is South Florida should be lost to future generations.

One of the reasons for the great popularity of the lower East Coast as a winter resort has been the mild winter climate. This same climatic condition has been, in part, responsible for the development of highly profitable specialized agriculture. An examination of records of climatic conditions will disclose the fact that such conditions have been becoming gradually less favorable and, if such trends continue, may well result in ultimate loss of both tourist appeal and special agricultural advantages. Amelioration of existing climatic conditions will be achieved through the proper solution of the physical problems of the area. As the overdrainage of The Everglades has progressed, the sponge-like soils of the undeveloped portions of the area have been robbed of their life-giving waters and, in addition, have been subjected to the

destructive influences of the musk-fires, to which reference is made elsewhere herein, thus resulting in widespread areas devoid of their protective waters. Dried out and burned soils do not retain the heat of the day but, contra-wise, do retain the cold of the night and in turn cool the overlaying air. The vagrant bodies of cold air thus created move senselessly from their point of origin and in so moving destroy valuable crops, wilt the pastures and render most unpleasant a stay at the seashore. All these adverse conditions will be eliminated when and as the undeveloped portions of The Everglades are restored to their original condition and nature will then begin its healing processes. We can all think of the name of at least one state presently enjoying less favorable conditions than does Florida, which would not permit any such hazard to its welfare even at a cost many times that involved in adjusting the basic problems of the Florida peninsula.

One of the great attractions of the lower 'Glades is the native wildlife which is slowly disappearing by reason of the conditions to which reference has been made elsewhere herein. The restoration of natural conditions will re-establish the native wild-life and thus create an allure of inestimable value in the attraction of additional tourists. Not only will such restoration be of value in and of itself, but will render more valuable the proposed National Park and thus create indirect earning value for much of the land not presently adapted to agricultural development. The natural condition of the lower 'Glades will be automatically restored when and as the physical characteristics of the region have been corrected.

Even the most casual survey will disclose a continuation, on an ever accelerating scale, of haphazard attempts to supply drainage, or water-control, to small, isolated and individually owned parcels of land. Such haphazard methods and practices are a menace to the well-being of the entire peninsula. Any substantial difference in rainfall from that of the past several years might well, and probably will, result in what may well be very unfortunate attempts at "shotgun protection" of such individual efforts. Plans for reclamation and development of the areas have always contemplated that definitive water control for specific areas would be supplied by works and facilities of a quasi-public authority whose efforts, plans and designs would be adjusted to the overall plans of the entire area and at the same time give full recognition to the carrying capacity of the various facilities already available or which might then be contemplated. It cannot be too emphatically stated that the sooner a return is had to this originally contemplated idea the less damage will occur to the entire area and the less costly will be the work of reclamation for any particular parcel of land. Haphazard methods for the disposal of surplus waters or the ingestion of water supplies should be prohibited at the earliest possible moment and the necessary authority established for study and approval or, if necessary, changes therein, of methods for reclamation of specific areas which should be under the control of a public body to assure that every such development may ultimately become a harmonious part of a general plan for the entire region. The comments just made must not be interpreted as a suggestion or recommendation for, or the approval of plans, methods

or attempts to supply definitive drainage to substantial bodies of undeveloped lands. These undeveloped lands, no matter where situated, should be restored to their natural condition until ready for immediate productive use thereof and thus conserve for the future those such presently unneeded lands.

Protection of domestic water supplies for the coastal residential areas; protection of water for livestock and pasturage in the natural range country; elimination of muck-fires and prevention of soil-subsidence in the agricultural regions; amelioration of climatic conditions, more particularly the elimination of the short but nonetheless damaging and unpleasant severe drops in temperature; restoration of natural conditions in the undeveloped areas for conservation of the soil and encouragement of native wild-life are all much to be desired achievements and are closely bound up in the hydrostatic characteristics of the entire lower peninsula. It would be a great calamity if, in an endeavor to promote some one of the objectives listed at the beginning of this paragraph or through ill-advised activities of numerous agencies having diverse aims and who ignore the over-all picture, the greater part of the entire situation be seriously damaged.

A reclamation and development project, such as that hereunder discussed and which of necessity encompasses the entire lower peninsula, without sound continuing economic policies and engineering practices is seldom successful and is never free of great waste. For these, and other reasons, it is most earnestly recommended that an over-all study, analysis and report be obtained from an outstanding engineering organization without affiliations or interests within the general area. The objective of such recommended study should be solely that of the practical problems of reclamation, conservation, development and control in the light of presently existing knowledge and with due regard to the economic considerations involved in the potential contributions to the welfare of the State and its people. It must be remembered that the general plan under which the development of the area proceeds will very largely determine the character, effectiveness and nature of the various elements involved in administration, engineering and financing aspects of the facilities necessary for realization of the ultimate good which may be expected from the high quality of management and statesmanship to which the project is entitled.