

ECONOMIC IMPACT OF THE C-43 RESERVOIR IN SOUTHWEST FLORIDA

FINAL REPORT

W. David Mulkey, Ph.D.
Alan W. Hodges, Ph.D.
Thomas J. Stevens III, Ph.D.
Fritz M. Roka, Ph.D.
and
Robert L. Degner, Ph.D.

March 14, 2005

Food and Resource Economics Department
Institute of Food and Agricultural Sciences
University of Florida

Project Report prepared for
Stanley Consultants, Inc.,
University of Florida Project 00050362

ECONOMIC IMPACT OF THE C-43 RESERVOIR IN SOUTHWEST FLORIDA

Executive Summary

The C-43 Basin Storage Reservoir is being constructed in north-western Hendry County, Florida to reduce fresh water flushes into the Charlotte Harbor estuary and to provide water storage for agriculture and urban communities in Southwest Florida. This includes Charlotte, Collier, Glades, Hendry and Lee counties. The reservoir is part of the Comprehensive Everglades Restoration Plan (CERP) and will ultimately involve over 14,000 acres of land. Most of the reservoir site will be located on a property known as Berry Groves, which is currently utilized for citrus production. The loss of this citrus production and removal of the land from the Hendry County property tax rolls has raised concerns about the local economic impacts of the project. In response, Stanley Consultants, Inc. (a contractor to South Florida Water Management District) requested the University of Florida to assess these impacts.

The objectives of this study are: (1), To assess economic impacts from the loss of citrus production (due to the Reservoir Project) on Hendry County and Southwest Florida, both from a commercial standpoint and as a result of reduced property tax revenues to Hendry County, and; (2), Assess economic impacts of Reservoir construction and operation on Hendry County and Southwest Florida.

To achieve these objectives, data from the U.S. Department of Agriculture and Department of Commerce, as well as from a previous study by the University of Florida, were used develop a descriptive overview of the economy and agriculture in Southwest Florida and Hendry County. Cost of production data for citrus in southwest Florida were obtained from the University of Florida and refined to reflect the technology of the region. Projected costs for reservoir construction, operation and maintenance were collected from Stanley Consultants, Inc. Input-output multipliers were then estimated using the *IMPLAN*® economic impact assessment software. These multipliers were then applied to the estimated changes in expenditures to assess total economic impacts of these activities on the regional economy. Interviews were also conducted with selected local government officials and realtors to assess the local opinion of the reservoir project, the nature of potential developments on lands surrounding the project, including lands being considered for transfer to private ownership by the South Florida Water Management District. Data from the Hendry County Property Appraiser and published data on county revenues and expenditures were used to estimate losses in property tax revenues to county government.

Annual expenditures (including returns to land, capital, management and harvesters) for producing citrus on 14,446 acres in southwest Florida were estimated to be \$38.88 million (Mn). The total economic impacts from lost citrus production on this property in Hendry County were estimated to be \$58.98 Mn in output, 1,020 jobs (fulltime and part-time or seasonal), \$29.98 Mn in value added, \$24.48 Mn in labor income, and \$1.85 Mn in indirect business taxes per year. Output impacts represent the change in total industrial output, or sales plus change in business inventories. The value added impacts represent the change in personal and business income, including property or investment-related income such as rents and dividends, while labor or “earned” income impacts are net of property-related income.

Indirect business tax impacts represent the change in payments to local, state and federal governments for property sales, and other taxes, but exclude income taxes. The largest impacts occurred in the agriculture sector, with \$21.59 Mn in total output impacts, 722 jobs, and \$12.73 Mn in value added impacts.

Including a 15 percent contingency allowance, expenditures for the construction of the C-43 reservoir are estimated to total \$332.12 Mn. Seventy-eight percent of this amount, or \$259.05 Mn, is scheduled to be spent within the southwest Florida region over a three-year period including, 2007, 2008 and 2009. The total output impacts for construction of the C-43 reservoir project are estimated to be \$486.76 Mn. A total of 6,350 jobs (fulltime and part-time or seasonal) are estimated to be generated by the project. These jobs are allocated over the three-year construction period, so the number of jobs created in any given year of the project would be a fraction of this number. The value-added impact of the construction project is estimated to be \$282.46 Mn. This includes \$248.89 Mn in labor income and \$13.19 Mn in indirect business taxes. The construction sector experiences the largest impacts from the project, with \$247.47 Mn in total output impacts, 3,527 jobs, and \$151.33 Mn in labor income impacts. It should be kept in mind that construction impacts are a one-time event over a three-year period, while the impacts from the loss of citrus production will recur annually in perpetuity.

Because property taxes are not paid by public agencies on lands they acquire, the C-43 project will have a detrimental fiscal impact on Hendry County government. Based on an estimated taxable value of \$29,874,642 for 14,666 acres of citrus and a countywide millage rate of 21.068 for 2004, annual property tax revenues would decline by \$629,399 per year for Hendry County as a result of these project lands being removed from the its tax rolls. Florida Statute No. 373.59 requires the State to compensate local governments for lost property tax revenues for a period of 10 years following the acquisition of such land. The Statute stipulates that local governments are to receive 10 annual payments in lieu of taxes from the State's Water Management Trust Fund equal the average taxes received for the three years prior to the acquisition. This gives the County time to adjust and adapt to the loss of such property tax revenues. Tax revenue losses and economic impacts may both be further mitigated by terms of the lease agreement which could allow some part of the land to be used for citrus production for several more years.

One proposal for mitigating the some of the negative economic and fiscal consequences of the C-43 project involves an exchange of 2,400 acres of privately-owned land south of the project site, for publicly owned property on the north side of the site. The property to the north of the site should have a higher development potential since it is closer to State Highway 80 and the Caloosahatchee River. An analysis of changes in tax revenues for several development alternatives using average residential and commercial property values and parcel sizes in 2004 revealed that converting 2,400 acres of land from agricultural to residential use (based on average values and densities for rural areas the County in 2004) would still leave the County \$153,000 short on tax revenues. Only when the average property value on the 2,400 acres exceeds \$17,896 per acre will the County's revenue losses from the acquired 14,666 acres of citrus be fully recovered. If the 2,400 acres were converted to Residential Single-Family land use at average values and densities currently found in the County, then it would see revenues

increase from \$470,000 to \$1,290,000 (depending on whether rural or county-wide averages are used) above what it received prior to the State's acquisition of the project site. The extent to which residential developments include other taxable property such as golf courses and other recreational facilities will also affect tax revenues.

On the expenditure side of fiscal impacts, the cost of community services for new developments will depend in large part on the demographic characteristics of new residents and the density of the development. Communities with older and more affluent residents (such as retirees) require fewer community services mainly due to the smaller number of school age children in families. Part-time residents may pose fewer demands for services and may not qualify for homestead exemptions. Another factor on the expenditure side of fiscal impacts will be the costs of infrastructure to support new communities. These costs are closely related to the density of development. It is not uncommon for the installation of power and water services to be paid through impact fees or by the developer as a part of the community approval process. These are factors that can be known only after specific developments are planned and evaluated.

General economic impacts resulting from additional residential development in the County will include those resulting from construction expenditures, expenditures related to financing, insuring, and transferring ownership of residential property, operation and maintenance expenditures for community facilities, and finally, household consumption expenditures. Unlike the case with citrus, where new dollars are generated by the sale of a product outside the region, the economic impact of residential communities depend on new residents purchasing goods and services locally while earning incomes from outside the local area. Thus, future impacts from consumer expenditures will depend on future development of retail and service businesses within Hendry County. The same point is worth noting with respect to expenditures associated with the construction, ownership transfer, and financing of new homes in residential developments. Much of this activity will take place within the Southwest Florida area, but not necessarily within Hendry County.

In discussions with local officials about Hendry County's economic prospects, most recognized a number of challenges with respect to future growth and development, but overall, the outlook regarding the County's economic future was positive. On the other hand, local officials were not positive about the future of citrus, although they did view the reduction in citrus caused by the reservoir project to be detrimental to the county. Most seemed to agree that the economic future of the county will depend on residential development that would primarily serve new residents. As a result, local officials are concerned about the ability of local government to provide the infrastructure and services demanded by a growing residential population.