



## Business Impact Estimate

*This form should be included in the "set for public hearing" agenda item for ordinances, and must be posted on the County's website by the time notice of the proposed ordinance is published.*

Ordinance title/reference:

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA, PERTAINING TO ANTECEDENT GROUNDWATER AND SURFACE WATER STAGES USED TO DESIGN SURFACE WATER MANAGEMENT SYSTEMS; AMENDING SECTION 27-200 OF THE BROWARD COUNTY CODE OF ORDINANCES ("CODE"); INCORPORATING A GROUNDWATER ELEVATION MAP REFLECTING THE 2070 FUTURE CONDITIONS; AND PROVIDING FOR SEVERABILITY, INCLUSION IN THE CODE, AND AN EFFECTIVE DATE.

If any of the following exceptions to the Business Impact Estimate requirement apply, check the applicable box and leave the remainder of the form blank.

- The ordinance is required for compliance with federal or state law or regulation;
- The ordinance relates to the issuance or refinancing of debt;
- The ordinance relates to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget;
- The ordinance is required to implement a contract or an agreement, including, but not limited to, any federal, state, local, or private grant, or other financial assistance accepted by the County;
- The ordinance is an emergency ordinance;
- The ordinance relates to procurement; or
- The ordinance is enacted to implement the following:
  - a. Part II of Chapter 163, relating to growth policy, county and municipal planning, and land development regulation, including zoning, development orders, development agreements, and development permits;
  - b. Sections 190.005 and 190.046, regarding community development districts;
  - c. Section 553.73, relating to the Florida Building Code; or
  - d. Section 633.202, relating to the Florida Fire Prevention Code.

1. Summary of the proposed ordinance (must include statement of the public purpose, such as serving the public health, safety, morals, and welfare):

The proposed ordinance amendment requires the use of updated values for groundwater elevations used in permitting and licensing the construction and operation of surface water management systems. The modeling results will likely show a decreased availability of belowground water storage due to the increase of local groundwater tables from sea level rise. This ordinance is beneficial to the health, safety, and welfare of the public to ensure new construction or site redevelopment accurately account for water storage. Considering reasonable future groundwater conditions makes the property more resilient to future conditions, and thus safer for the occupants, surrounding areas, and other residents, and allows property owners to avoid future costs to address flooding impacts.

2. Estimate of direct economic impact of the proposed ordinance on private, for-profit businesses in Broward County:

It is impossible to estimate the direct economic impact of the proposed ordinance, as each development or redevelopment plan is unique and will contend with a host of site specific environmental and hydrological variables. However, the overall positive economic impact resilience-related investments is well documented in the Urban Land Institute's publication titled, *The Business Case for Resilience in Southeast Florida: Regional Economic Benefits of Climate Adaptation*. The report highlights a 4:1 benefit-cost ratio for building level investments in resilient infrastructure and 2:1 positive return on community-wide investments. If current development practices continue without consideration of future groundwater conditions, Broward County and the greater Southeast region could lose over \$4.2 billion dollars in property values due to daily tidal inundation by 2040. By 2070, County residents and businesses could suffer from the exposure of \$53.6 billion dollars of property value, impacts to 17,800 jobs and \$384 million in fiscal losses. Broward's recent hydrological modeling efforts show a nearly 1 to 1 relationship between sea level rise and ground water elevation rise in coastal areas. Since 2017, Broward County has considered groundwater rise in its Future Conditions Map Series; literature and economic estimates are just starting to catch up to this groundbreaking work. Additionally, homes and business that address future groundwater elevations will be better positioned to access reduced flood insurance premia that considers the finished floor elevation of a structure.

3. Estimate of direct compliance costs that businesses may reasonably incur:

The amendment will not require businesses to incur new modeling costs. Presently, license applicants must perform hydrologic modeling to determine the average wet season groundwater elevations in 2060. The proposed amendments will require applicants to use a specific modeling run to determine the average wet season groundwater elevation in 2070. Secondary costs that developers may incur to provide adequate water retention and meet the conditions for issuance are difficult to ascertain since each development or redevelopment plan is unique and must address site specific environmental and hydrological variables. It is anticipated that any direct costs will be recovered through lessened and avoided flood impacts.

4. Any new charge or fee imposed by the proposed ordinance:  
Not Applicable.

5. Estimate of the County's regulatory costs, including estimated revenues from any new charges or fees to cover such costs:  
Not Applicable.

6. Estimate of the number of businesses likely to be impacted by the proposed ordinance:  
Staff worked with the Office of Economic and Small Business Development to determine that there are currently 830 County-certified business entities (CBE) in the business activity categories of architecture & engineering (95), commodities supplier (31), construction services (271), contract services (330), contract services/commodity supplier (28), and licensed professional services (75). In addition, the County has general contractors (3821), architects (135), and engineers (380) on the Broward County Records, Taxes, and Treasury roll. Where the updated map shows an increase in groundwater elevation, more robust project engineering and design may be required to meet future conditions for new developments or redevelopments in order to meet existing licensing criteria. Staff expects these businesses would financially benefit as property owners retain their services to design and construct stormwater features.

7. Additional information (if any):  
The Broward County Board of County Commissioners requested the creation of a Future Conditions Map Series on February 7, 2017 (Agenda Item # 7) and adopted the Future Conditions Wet Season Groundwater Table Map in the Code of Ordinances June 30, 2017. The County has required surface water license and development applicants to account for the average wet season groundwater elevation since June 30, 2017. The County last updated the requirements with the establishment of the future conditions groundwater map in 2017, requiring applicants to account for the 2060 average wet season groundwater elevation. This item proposes updating the map to a 2070 future condition, thereby using the best available science to project the future groundwater conditions as directly impacted by sea level rise. The item does not seek to restrict development, only to inform developers, engineers, and other professionals to make sound resilience investments that serve the entire lifespan of the project.