



AGENDA MEMORANDUM

Planning Department

LDC Subcommittee Meeting Date: June 11, 2024

To: LDC Subcommittee

From: Kim Ruiz, Principal Planner

Date: June 4, 2024

CITY COUNCIL INITIATED PROPOSED CONSIDERATION

At their April 5, 2022, meeting, City Council directed the Planning Commission and staff to review and provide recommendations for the definition of ***open body of water***. The intent of the review is to ensure definitions are clear and the references to these definitions in the Code are also understandable.

REVIEW TIMELINE

- June 14, 2022 – Planning Commission Meeting – The Planning Department presented a proposed revision to the ***open body of water*** definition and introduced definitions for ***mean high water, mean high-water line, mean low water, and wetlands*** based upon definitions adopted in the Florida Statutes, Chapters 117 and 373. The discussion provided in the memorandum explained how Planning staff determined the proposed revisions and additions to the Land Development Code (LDC aka *Sanibel Code*) for clarification.
 - After a lengthy discussion, the Planning Commission instructed Planning staff to also evaluate using the Ecological Zone Maps in determining the presence of open body of water and to consider a de minimis standard for areas to be excluded from being considered an open body of water. The definitions for mean high water, mean high-water line, mean low water, and wetlands were accepted as pertinent additions to the Sanibel Code. Other amendments to the Sanibel Code in relation to open body of water were included in the meeting material but were not discussed because a consensus on delineating an open body of water was not yet achieved. Staff was directed to bring revisions to the LDC Subcommittee in August.
- August 23, 2022 – Land Development Code Subcommittee Meeting – Planning staff recommended a minor revision to the ***open body of water*** definition and the addition of a new section **Determination and Delineation of Open Body of Water**.
 - A discussion on determination and delineation of open body of water was provided with the proposed standards for delineating open bodies of water along with a de minimis exception. The subcommittee members determined another LDC Subcommittee meeting should be held for further consideration of the proposed amendments.

Sanibel is and shall remain a barrier island sanctuary

- March 12, 2024 – Planning Commission Meeting – Planning staff provided updated amendments to the Sanibel Code based upon the LDC Subcommittee meeting on August 23, 2022.
 - The Planning Commission continued discussion of the proposed amendments and had further questions regarding the USGS monitoring well data from the 1970s. Staff was directed to further evaluate available data.

SUMMARY OF DATA RESEARCH (New discussion for June 11 meeting)

- The data from the 26 groundwater monitoring wells in the 1970s consists of monthly recording of the high-water level.
 - This data was recorded in feet above mean sea level (MSL).
 - Staff located an online conversion tool produced by NOAA to convert MSL to NAVD. However, upon discussions with Oisin Dolley, PE, it was found that common practice by engineers working with groundwater elevations is to use the MSL elevation as if it were an elevation in NGVD.
- Planning staff verified that data from one USGS groundwater monitoring well (L-1403) is available after the 1970s.
 - The well is located within the D-2 Upland Wetlands Zone.
 - There are daily recordings of the high-water level from January 2005 through December 2017.
 - Data was recorded in NGVD which converts to NAVD by subtracting 1.18-feet.
 - The data prior to 2005 has gaps.
 - The data after 2017 consists of monthly readings.
- The data from 2005-2017 was analyzed to determine a mean high-water level (MHWL) for the groundwater during this 12-year period to be 1.26-feet NAVD.
- The 2005-2017 data was then analyzed to confirm the average length of time the water level was 6-inches above the mean high-water level to determine whether the groundwater level would reach an elevation with inundation for a minimum of 3 months (i.e., a defining part of delineating an open body of water).
 - The length of time the groundwater level was at or above 1.76-feet NAVD was 112 days or 3.7 months.
 - Additional analysis of this data may further the understanding of the elevation above MHWL that is typically inundated for a minimum of 3 months.
- USGS/NRCS LiDAR data from 2018 are now available through an online tool.
 - A new tool for evaluating properties.
 - Elevation cross-sections are generated.

- Staff will present an example of how the LiDAR tool works.
- Additional evaluation of this new tool is needed for staff to determine how this information may be used to identify potential open bodies of water.

NATURAL VS. HUMAN-MADE OPEN BODIES OF WATER

Questions have been raised by the public concerning whether human-made open bodies of water are evaluated differently from natural open bodies of water. These issues were brought forward during the Planning Commission public hearing on May 28 for a unified residential development or cluster development subdivision.

During the public hearing Planning staff confirmed that the *Sanibel Code* does not contain standards for filling or dredging an open body of water, whether natural or human-made. The *Sanibel Plan* includes language indicating that *Sanibel Code*, State and Federal regulations will need to be followed for dredging or filling.

It would be appropriate to compile dredging and filling standards for wetlands and open bodies of water with the proposed amendments to the Sanibel Code currently under discussion.

RECOMMENDATIONS

1. Additional review of USGS/NRCS LiDAR.
2. Revise amendments based upon the additional analysis of groundwater elevations and comparison of natural vs. human-made open bodies of water in relation to dredging and filling.
3. Present revised amendments to the LDC Subcommittee in August for discussion.