LDC Subcommittee Meeting

June 11, 2024

DISCUSSION OF PROPOSED AMENDMENTS TO THE SANIBEL CODE IN RELATION TO OPEN BODY OF WATER

Open Body of Water

Identifying location and extent of an open body of water is an important aspect of land development on Sanibel.

- Development Intensity in Modern Platted Subdivision
  - Subtracted from parcel size before calculating number of dwelling units allowed by development intensity
- Site Design
  - 20-foot setback
  - Subtracted from parcel size before calculating maximum impermeable cover and maximum vegetation removal and developed area

Open Body of Water Definition

any natural or artificial area that is inundated with water at least three months of an average calendar year. Such bodies include, but are not limited to, lakes, ponds, rivers, creeks, marshes, sloughs, ditches, canals, bays, inlets, lagoons, swamps, bayous, cuts, gulfs and retention ponds.

Sanibel Code Section 78-1

Additional Research and Evaluation

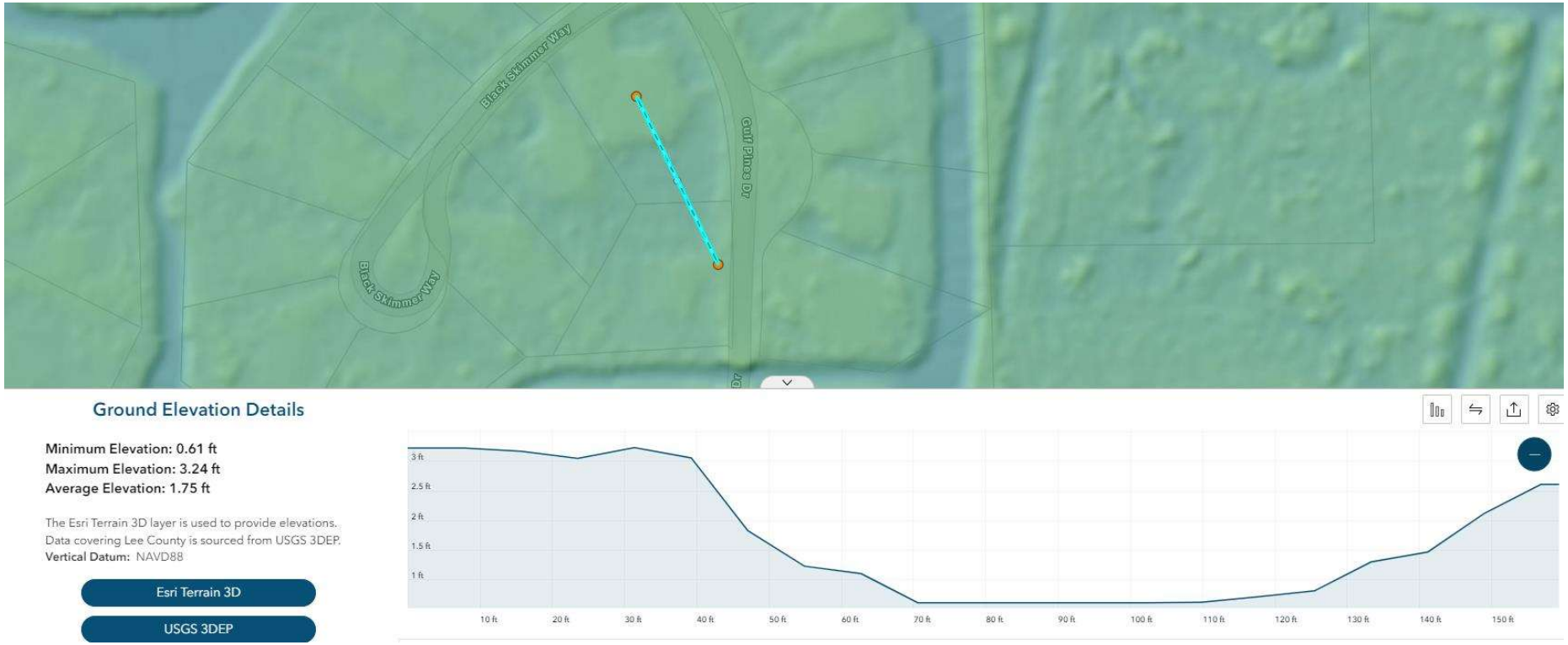
Daily groundwater level data 2005-2017 for USGS Monitoring Well L-1403

USGS/NRCS 2018 LiDAR Online Tool

USGS Groundwater Elevation Monitoring Well L-1403

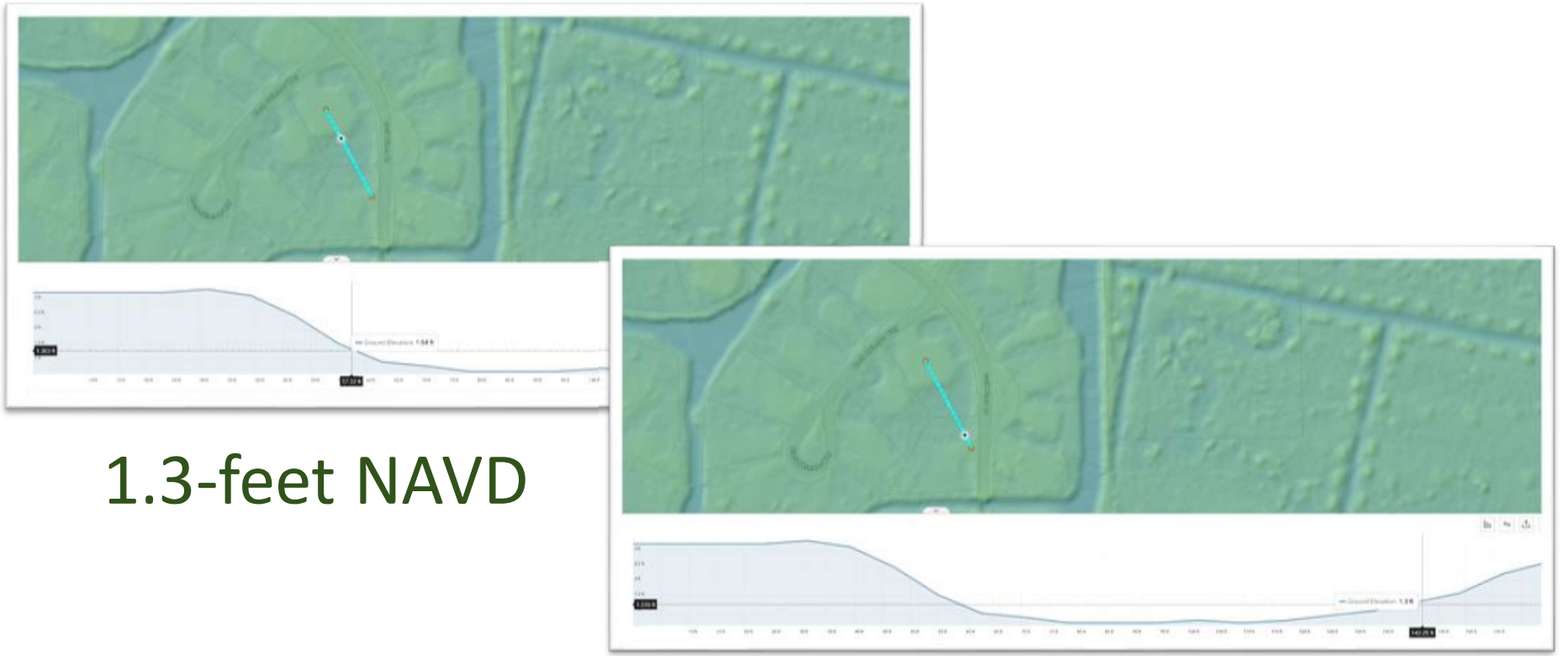
- **Continuous Daily Data**
  - **2005-2017**
- **12-year Averages**
- **Located in D2-Upland Wetland Zone**

	Mean High-Water Level (Feet NAVD)	Number of Consecutive Days at 1.76 ft NAVD or above
2005	1.69	214
2006	1.06	96
2007	0.27	16
2008	1.53	127
2009	1.22	140
2010	0.82	58
2011	1.08	123
2012	1.20	114
2013	1.50	133
2014	0.96	81
2015	1.82	168
2016	1.32	66
2017	1.91	120
AVG	**1.26**	**112**



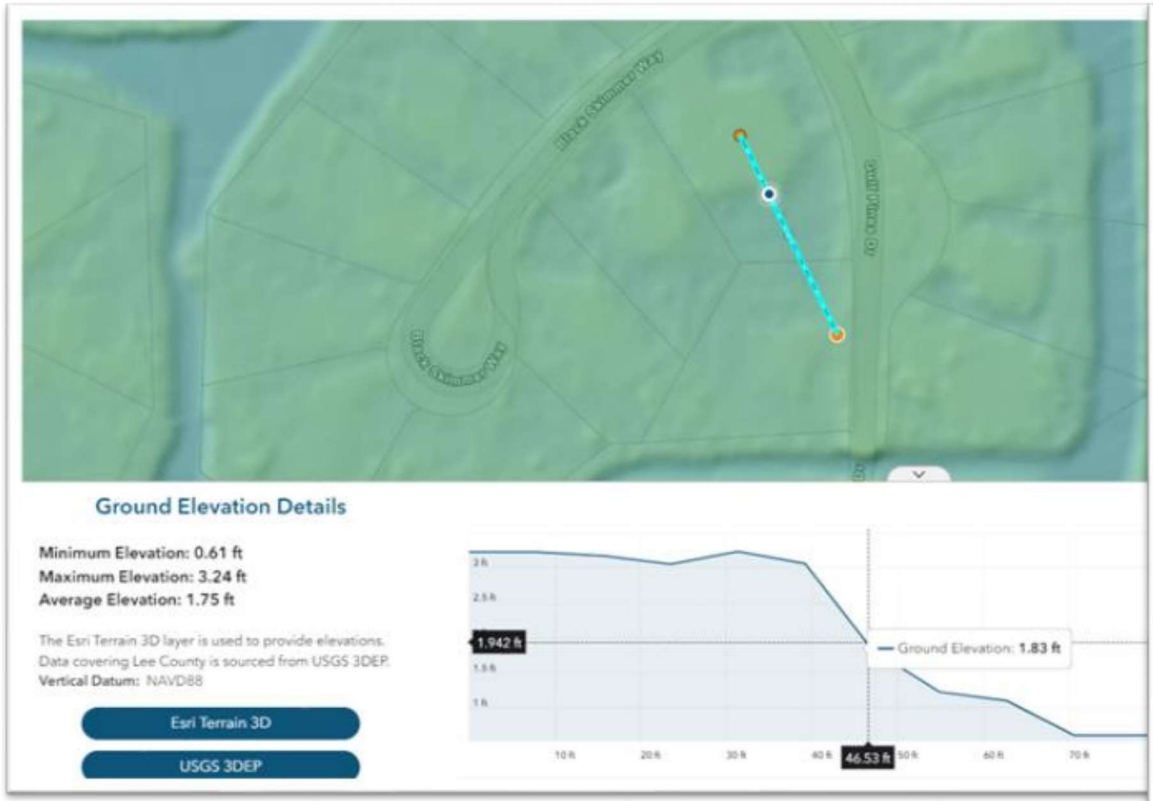
USGS/NRCS LiDAR

D1 – Lowland Wetlands Zone



1.3-feet NAVD

USGS/NRCS LiDAR



USGS/NRCS LiDAR

1.8-feet NAVD

2023 Aerial

2024 Aerial

Recommended Actions

Additional review of USGS/NRCS LiDAR

Revise amendments based upon the additional analysis of groundwater elevations and comparison of natural vs. human-made open bodies of water

Present revised amendments to LDC Subcommittee in August for discussion