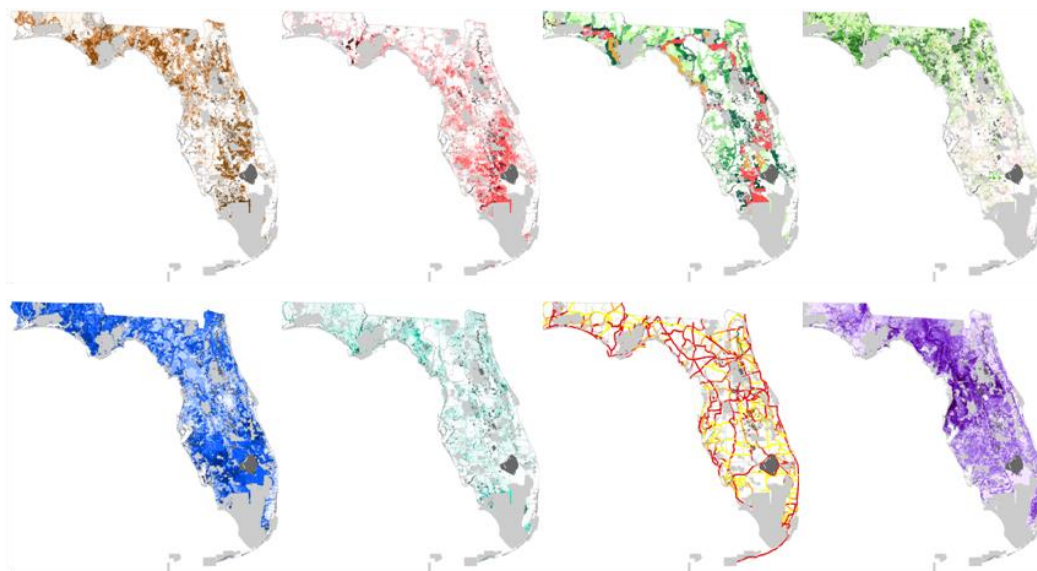# Florida Forever Conservation Needs Assessment
Overview Maps

Prepared by Florida Natural Areas Inventory, November 2020

The maps in this document are derived from the Florida Forever Conservation Needs Assessment, an analysis of the geographic distribution of certain natural resources and resource-based land uses that have been identified in the Florida Forever Act (F.S. 259.105) as needing increased conservation attention. Data for the Needs Assessment are maintained and updated by Florida Natural Areas Inventory under contract to the Florida Department of Environmental Protection and in collaboration with many partners. The data represent a statewide view of resource distributions and are intended to inform state conservation priorities and measure progress of the Florida Forever program in protecting these resources.

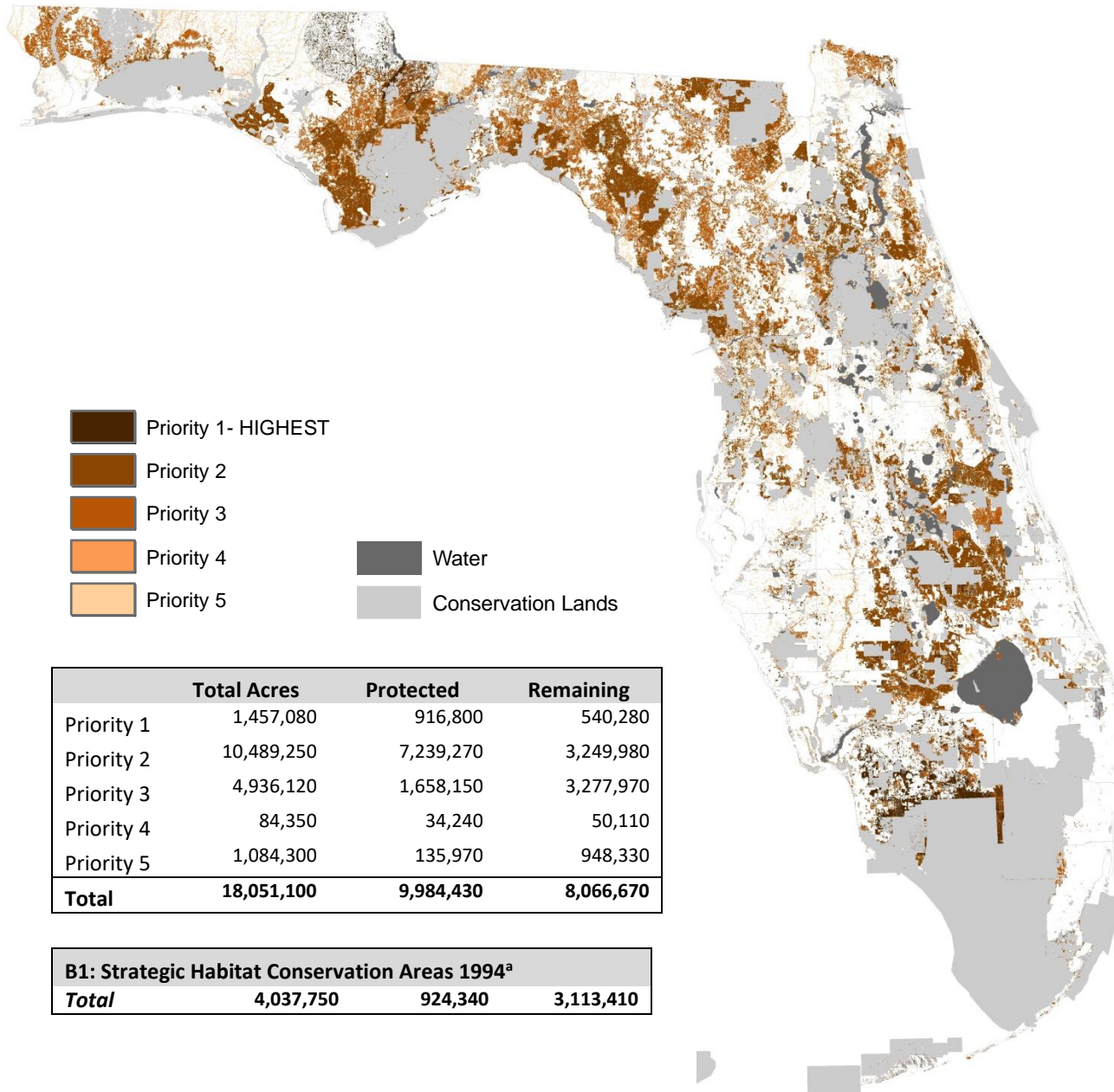# Florida Forever Conservation Needs Assessment Overview Maps

Conservation Needs Assessment Maps

Strategic Habitat Conservation Areas for Florida Forever	Map 1
FNAI Rare Species Habitat Conservation Priorities	Map 2
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Under-represented Ecosystems	Map 4
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Decision Support Combined Maps

Species   Map 13

Combined: Strategic Habitat Conservation Areas for Florida Forever
Rare Species Habitat Conservation Priorities

Natural Communities   Map 14

Combined: Under-represented Ecosystems
Fragile Coastal Resources – Coastal Uplands and Imperiled Coastal Lakes

Wetlands/Floodplain   Map 15

Combined: Functional Wetlands
Natural Floodplain Function

Strategic Habitat Conservation Areas *(modified for Florida Forever Conservation Needs Assessment)*

Priority 1- HIGHEST

Priority 2

Priority 3

Priority 4

Priority 5

Water

Conservation Lands

	Total Acres	Protected	Remaining
Priority 1	1,457,080	916,800	540,280
Priority 2	10,489,250	7,239,270	3,249,980
Priority 3	4,936,120	1,658,150	3,277,970
Priority 4	84,350	34,240	50,110
Priority 5	1,084,300	135,970	948,330
Total	**18,051,100**	**9,984,430**	**8,066,670**

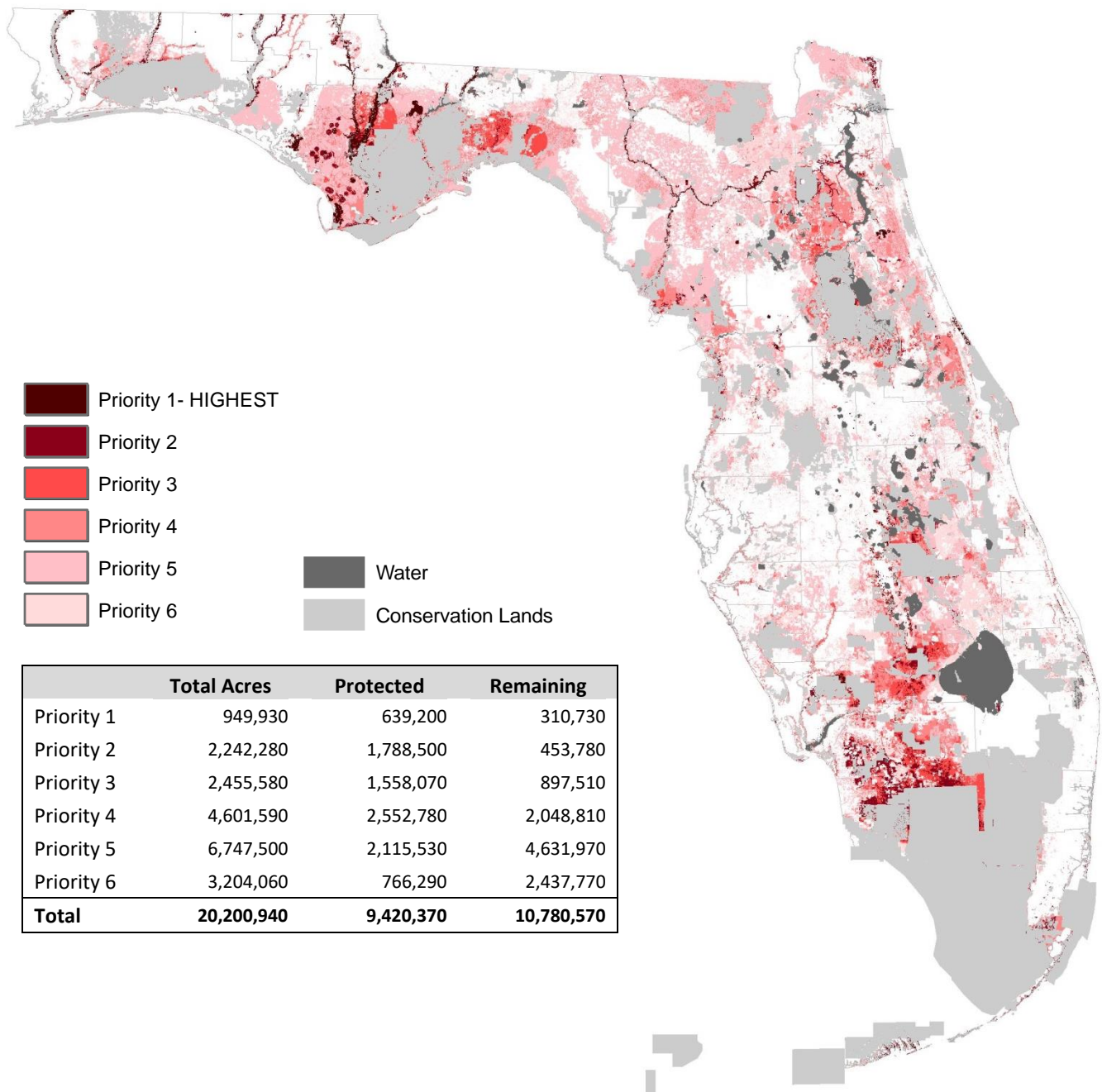| B1: Strategic Habitat Conservation Areas 1994[a]			
Total	**4,037,750**	**924,340**	**3,113,410**

November 2020

The information displayed on this map was developed or provided to address specific performance measures of the Florida Forever program. The data may not be appropriate for general use and are not intended for use in a regulatory decision making process.

Source: Florida Fish and Wildlife Conservation Commission

Description: The 2009 SHCAs identify areas of habitat on private lands that are essential to sustain a minimum viable population for focal species of terrestrial vertebrates that are not adequately protected on existing conservation lands. To more adequately represent habitat within existing conservation lands, FNAI worked with FWC to augment the original SHCA dataset to include potential habitat within conservation lands for all 62 focal species. The modified SHCAs include habitat data for 62 terrestrial vertebrate species and are prioritized into five priority classes based on rarity (FNAI State and Global ranks).   For more information on the modified SHCAs, see the Cons. Needs Assessment Tech. Report: http://www.fnai.org/FlForever.cfm. Note that the 2009 SHCAs constitute a significant revision of the original SHCAs published in 1994 which identified approximately 4 million acres for 30 focal vertebrate species. For more information: http://research.myfwc.com/features/view_article.asp?id=29815.

Rare Species Habitat Conservation Priorities

Priority 1- HIGHEST
Priority 2
Priority 3
Priority 4
Priority 5
Priority 6

Water
Conservation Lands

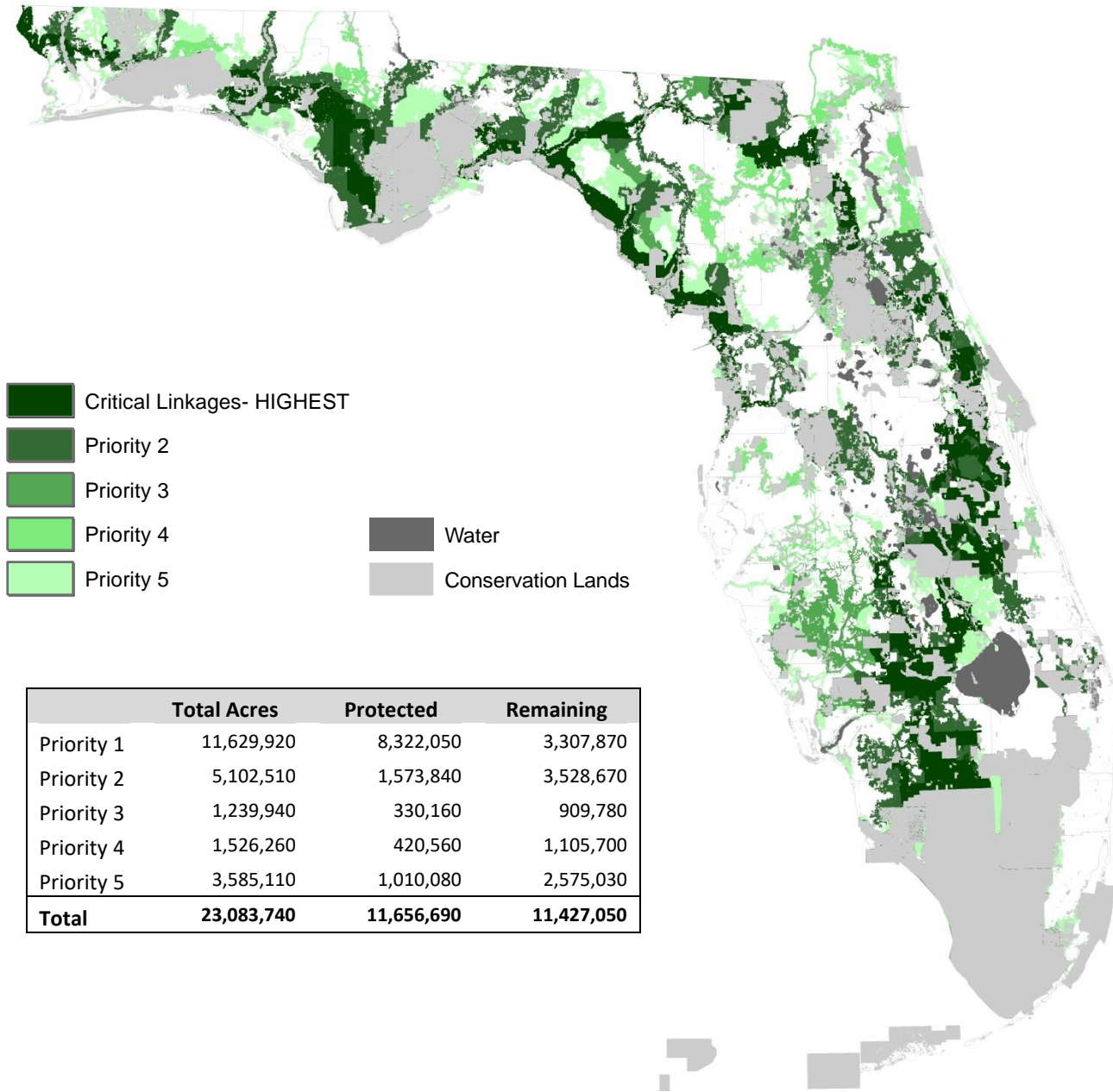|	Total Acres	Protected	Remaining
Priority 1	949,930	639,200	310,730
Priority 2	2,242,280	1,788,500	453,780
Priority 3	2,455,580	1,558,070	897,510
Priority 4	4,601,590	2,552,780	2,048,810
Priority 5	6,747,500	2,115,530	4,631,970
Priority 6	3,204,060	766,290	2,437,770
Total	**20,200,940**	**9,420,370**	**10,780,570**

November 2020

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Primary Source: Florida Natural Areas Inventory

Description: The Rare Species Habitat Conservation Priorities data layer includes occurrence-based habitat for 281 species with a high conservation need including plants, invertebrates, and vertebrates. Individual species maps are weighted according to conservation need and overlaid to reflect values for both rarity and richness. The final layer prioritizes places on the landscape that would protect both the greatest number of rare species and those species with the greatest conservation need.   For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Landscape Linkage

Legend:
- Critical Linkages- HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Water
- Conservation Lands

	Total Acres	Protected	Remaining
Priority 1	11,629,920	8,322,050	3,307,870
Priority 2	5,102,510	1,573,840	3,528,670
Priority 3	1,239,940	330,160	909,780
Priority 4	1,526,260	420,560	1,105,700
Priority 5	3,585,110	1,010,080	2,575,030
Total	**23,083,740**	**11,656,690**	**11,427,050**

November 2020

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Primary Source: University of Florida; FDEP/Office of Greenways and Trails

Description: Landscape Linkages is represented by the Florida Ecological Greenways Network as revised in 2016, a statewide system of landscape hubs, linkages, and conservation corridors. Prioritization is based on factors such as importance for wide-ranging species, importance for maintaining a connected reserve network, and riparian corridors. Critical Linkages are considered most important for completing a statewide ecological network of public and private conservation lands.

Under-represented Ecosystems

	Total Acres	Protected	Remaining
Upland Glade (G1)	30	0	30
Pine Rockland (G1)	16,900	16,110	790
Scrub & Scrubby Flatwoods (G2)	507,380	371,600	135,780
Rockland Hammock (G2)	19,100	16,620	2,480
Dry Prairie (G2)	154,770	104,230	50,540
Seepage Slope (G2)	6,230	6,200	30
Sandhill (G3)	829,600	517,490	312,110
Sandhill Lake (G3)	76,280	15,270	61,010
Upland Pine (G3)	220,200	171,110	49,090
Pine Flatwoods (G4)	2,381,090	1,310,740	1,070,350
Upland Hardwood Forest (G5)	200,530	37,580	162,950
Total	**4,412,110**	**2,273,610**	**1,845,160**

Legend:
- Upland Glade (G1)
- Pine Rockland (G1)
- Scrub and Scrubby Flatwoods (G2)
- Rockland Hammock (G2)
- Dry Prairie (G2)
- Seepage Slope (G2)
- Sandhill (G3)
- Sandhill Upland Lake (G3)
- Upland Pine (G3)
- Pine Flatwoods (G4)
- Upland Hardwood Forest (G5)
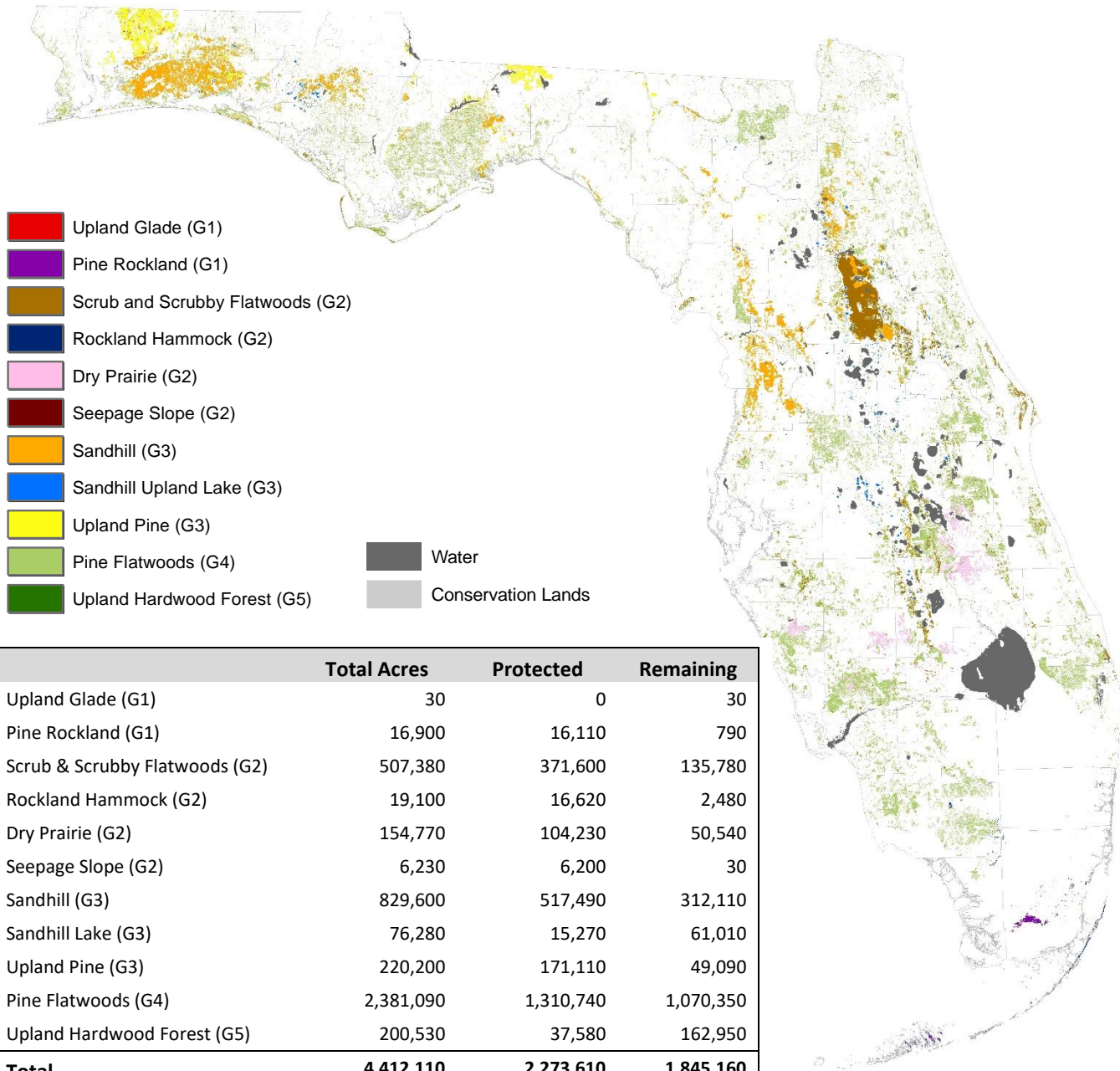- Water
- Conservation Lands

November 2020

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Primary Source: Florida Natural Areas Inventory

Description: This data layer includes natural communities that are inadequately represented on conservation lands. A natural community generally is considered under-represented if less than 15% of the original extent of that community in Florida is currently found on existing conservation lands. The natural communities are prioritized by rarity (FNAI Global rank). For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Large Landscapes

Florida Forever BOT Projects - Contribution to Large Landscape

- **VERY HIGH**
- **HIGH**
- **MEDIUM**
- **MED LOW**
- **LOW / NONE**

Existing Large Landscapes >50,000 Acres
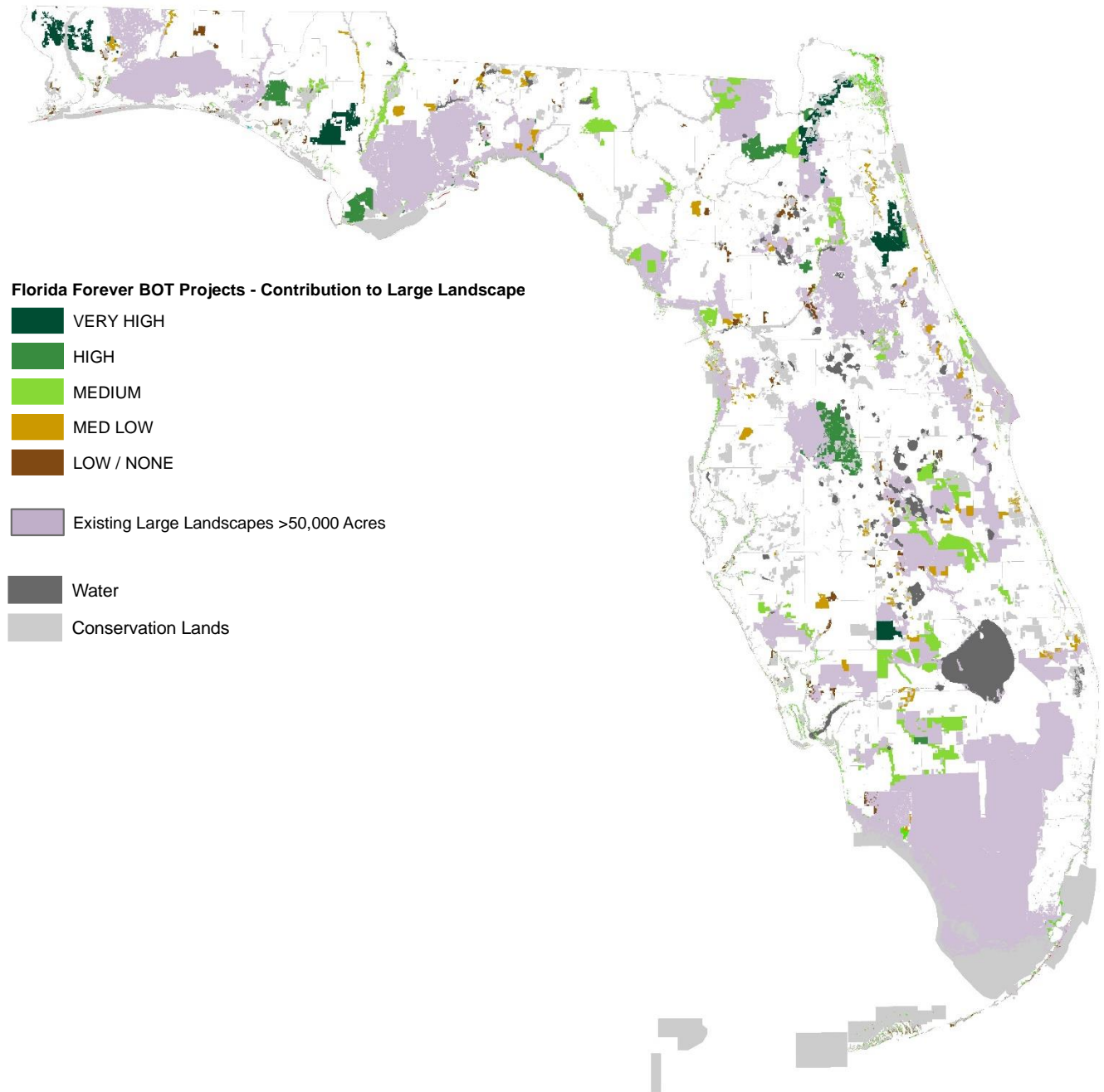
Water

Conservation Lands

November 2020

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Primary Source: Florida Natural Areas Inventory

Description: The Large Landscapes dataset depicts existing conservation land complexes that comprise contiguous areas of >50,000 acres. Current Florida Forever BOT Projects are prioritized based on their potential contribution to large landscapes >50,000 acres. Protection of these areas would contribute to maintenance of ecosystem processes on a landscape level. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Natural Floodplain Function

Legend:
- Priority 1 - HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Priority 6
- Water
- Conservation Lands

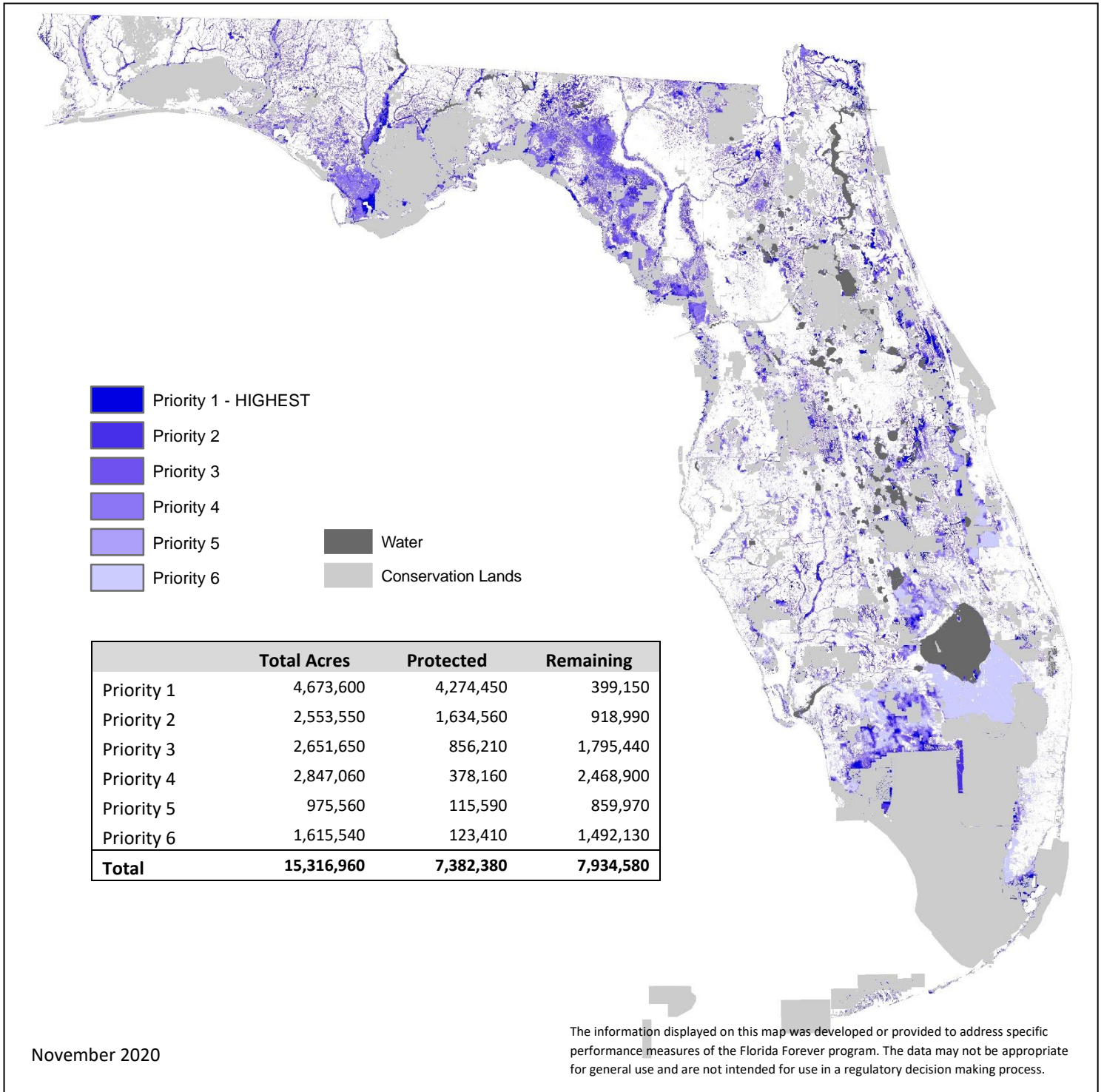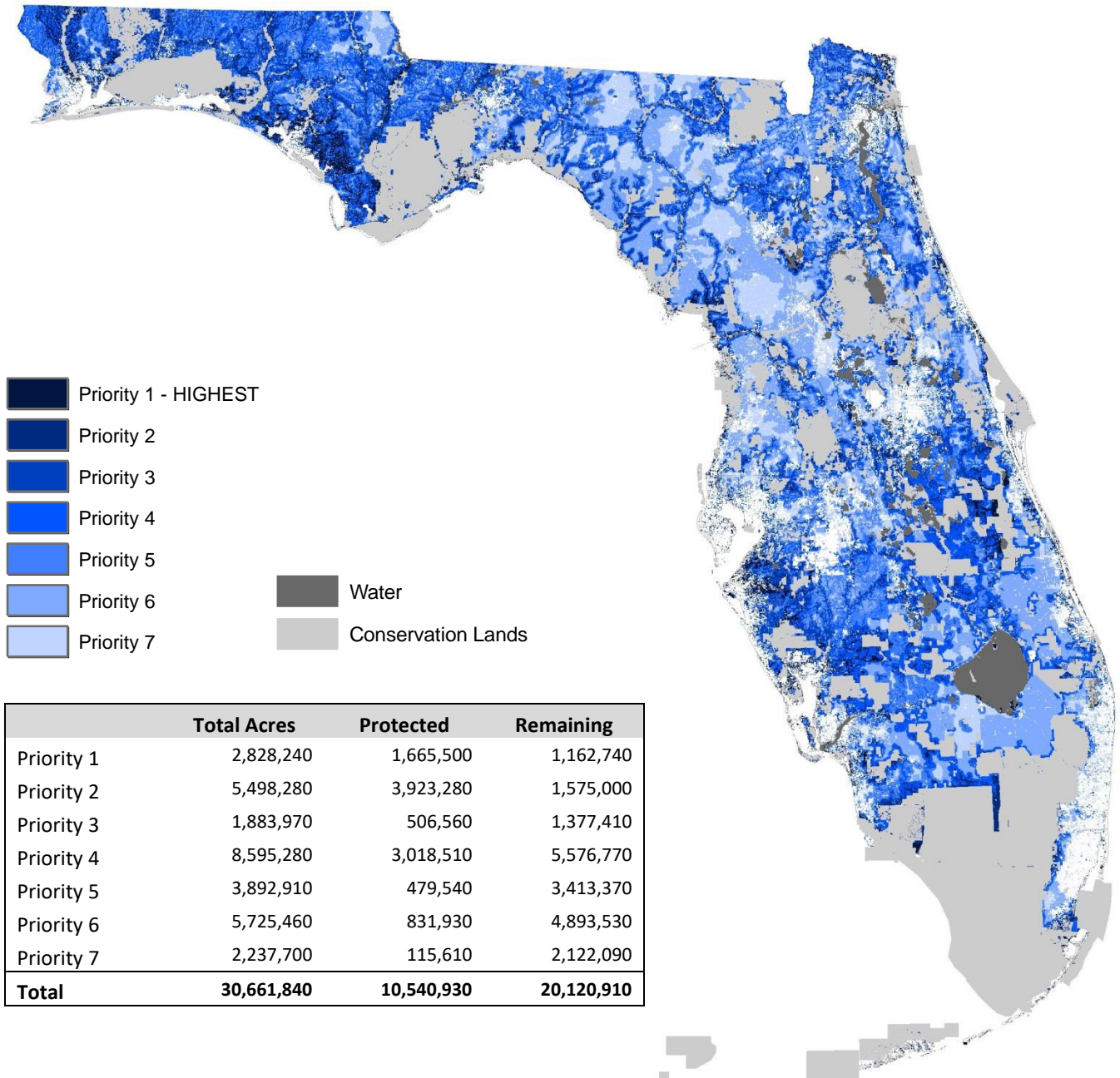|	Total Acres	Protected	Remaining
Priority 1	4,673,600	4,274,450	399,150
Priority 2	2,553,550	1,634,560	918,990
Priority 3	2,651,650	856,210	1,795,440
Priority 4	2,847,060	378,160	2,468,900
Priority 5	975,560	115,590	859,970
Priority 6	1,615,540	123,410	1,492,130
Total	**15,316,960**	**7,382,380**	**7,934,580**

November 2020

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Primary Source: Florida Natural Areas Inventory

Description: This data layer identifies natural features within the 100-year floodplain as determined by from three primary sources: 1) FEMA Digital Flood Insurance Rate Map database 2001-2017 (DFIRM) for 63 counties; 2) FEMA Digital Q3 Flood Data 1996 for 4 counties; and 3) a surrogate floodplain dataset based on overlap of wetlands and hydric soils for gaps in FEMA data. The data were prioritized based on the degree of "naturalness" of the floodplain, which was estimated based on overlap with Land Use Intensity index and FNAI Potential Natural Areas. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Surface Water Protection

	Total Acres	Protected	Remaining
Priority 1	2,828,240	1,665,500	1,162,740
Priority 2	5,498,280	3,923,280	1,575,000
Priority 3	1,883,970	506,560	1,377,410
Priority 4	8,595,280	3,018,510	5,576,770
Priority 5	3,892,910	479,540	3,413,370
Priority 6	5,725,460	831,930	4,893,530
Priority 7	2,237,700	115,610	2,122,090
Total	**30,661,840**	**10,540,930**	**20,120,910**

Legend: Priority 1 - HIGHEST, Priority 2, Priority 3, Priority 4, Priority 5, Priority 6, Priority 7, Water, Conservation Lands
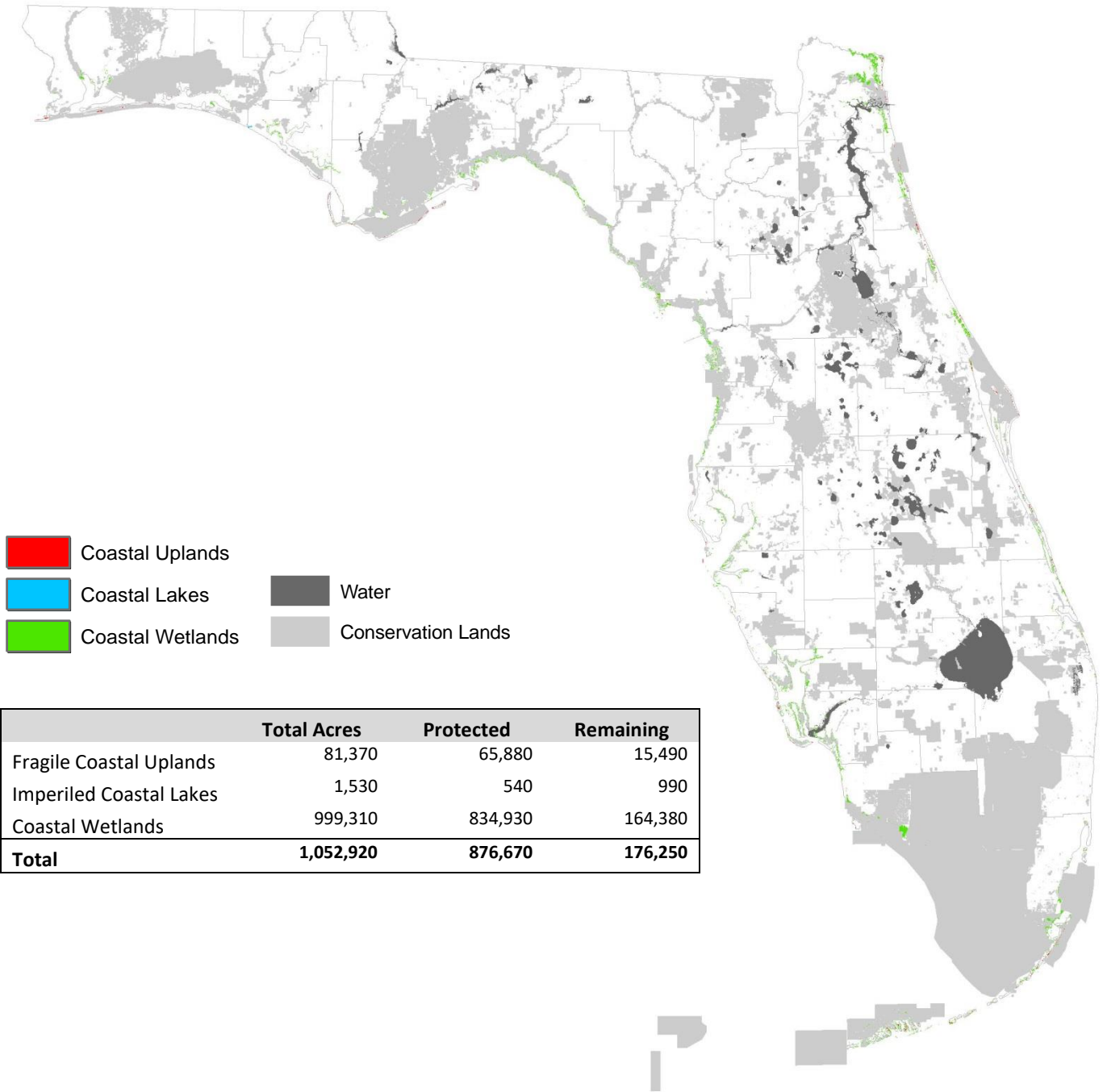
November 2020

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Primary Source: Florida Natural Areas Inventory in collaboration with water resource experts

Description: The surface water data identifies significant high quality surface waters of the state, which include the following: Outstanding Florida Waters, National Scenic Waters and National Estuaries, shellfish harvesting areas, seagrass beds, springs, water supply and waters important for imperiled fish. The data are prioritized based on proximity to a water body, stream order, downstream length, basin size and other factors. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Fragile Coastal Resources

Legend:

- Coastal Uplands (red)
- Coastal Lakes (blue)
- Coastal Wetlands (green)
- Water (dark gray)
- Conservation Lands (light gray)

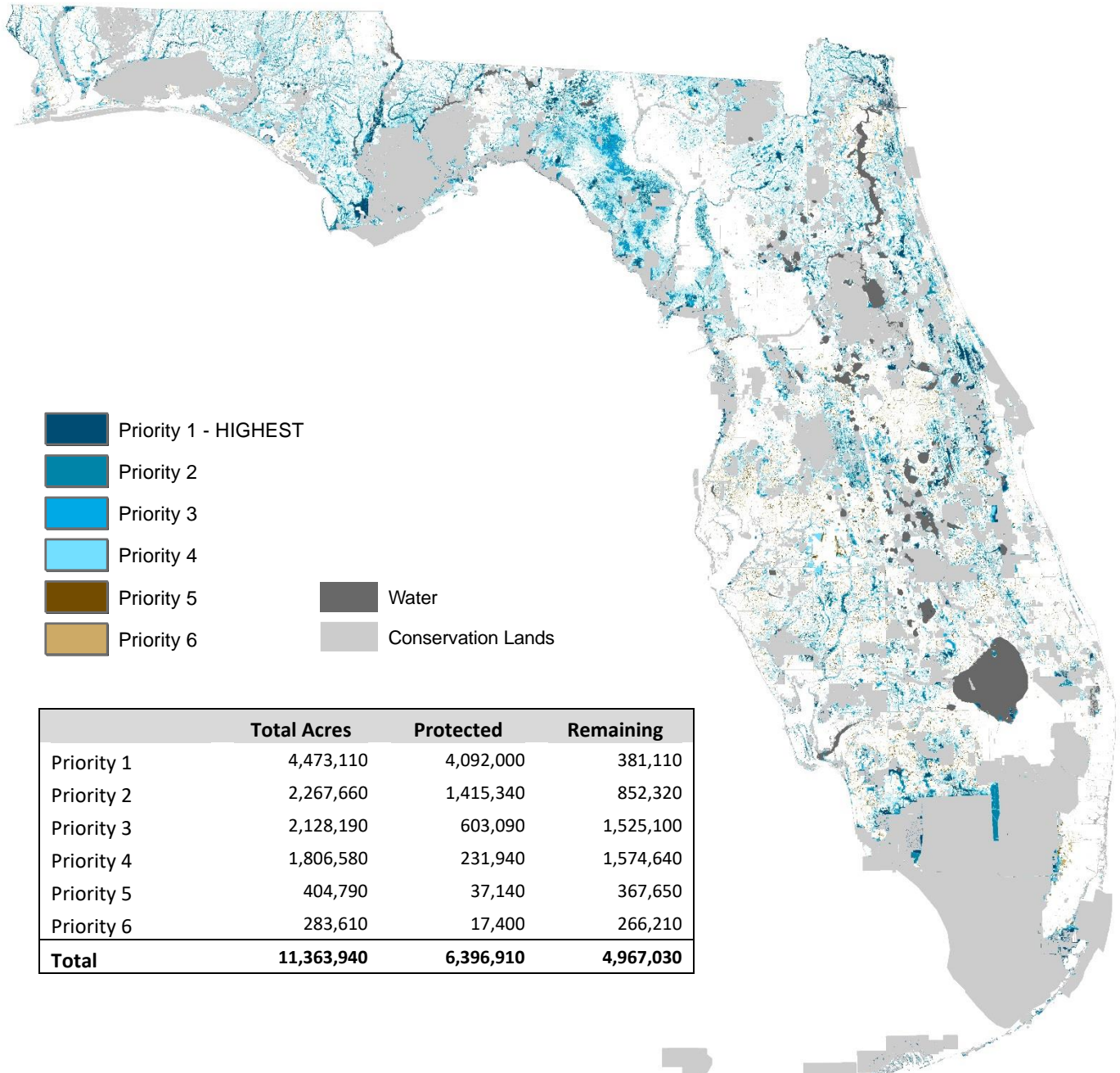|	Total Acres	Protected	Remaining
Fragile Coastal Uplands	81,370	65,880	15,490
Imperiled Coastal Lakes	1,530	540	990
Coastal Wetlands	999,310	834,930	164,380
Total	**1,052,920**	**876,670**	**176,250**

November 2020

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Primary Source: Florida Natural Areas Inventory

Description: The fragile coastal resources data layer identifies natural communities within one mile of the coast that are most vulnerable to disturbance or development including beach dune (G3), coastal scrub (G2), coastal grasslands (G3), coastal strand (G2), maritime hammock (G3), shell mound (G2), coastal dune lake (G2), coastal rockland lake (G2), mangrove wetlands (G5) and salt marsh (G5). For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Functional Wetlands

Legend:
- Priority 1 - HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Priority 6
- Water
- Conservation Lands

	Total Acres	Protected	Remaining
Priority 1	4,473,110	4,092,000	381,110
Priority 2	2,267,660	1,415,340	852,320
Priority 3	2,128,190	603,090	1,525,100
Priority 4	1,806,580	231,940	1,574,640
Priority 5	404,790	37,140	367,650
Priority 6	283,610	17,400	266,210
Total	**11,363,940**	**6,396,910**	**4,967,030**

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November 2020

Primary Source: Florida Natural Areas Inventory

Description: The Functional Wetlands data layer is based on wetlands identified in the Cooperative Land Cover Map v3. Functional wetlands are defined as those in a more natural state and the prioritization is based on overlap with Land Use Intensity index and FNAI Potential Natural Areas. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Groundwater Recharge

	Total Acres	Protected	Remaining
Priority 1	1,122,030	243,460	878,570
Priority 2	3,310,030	544,070	2,765,960
Priority 3	6,133,020	1,164,490	4,968,530
Priority 4	7,555,200	1,750,470	5,804,730
Priority 5	6,685,890	1,824,530	4,861,360
Priority 6	8,633,890	4,315,450	4,318,440
Total	**33,440,060**	**9,842,470**	**23,597,590**

Legend:
- Priority 1- HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
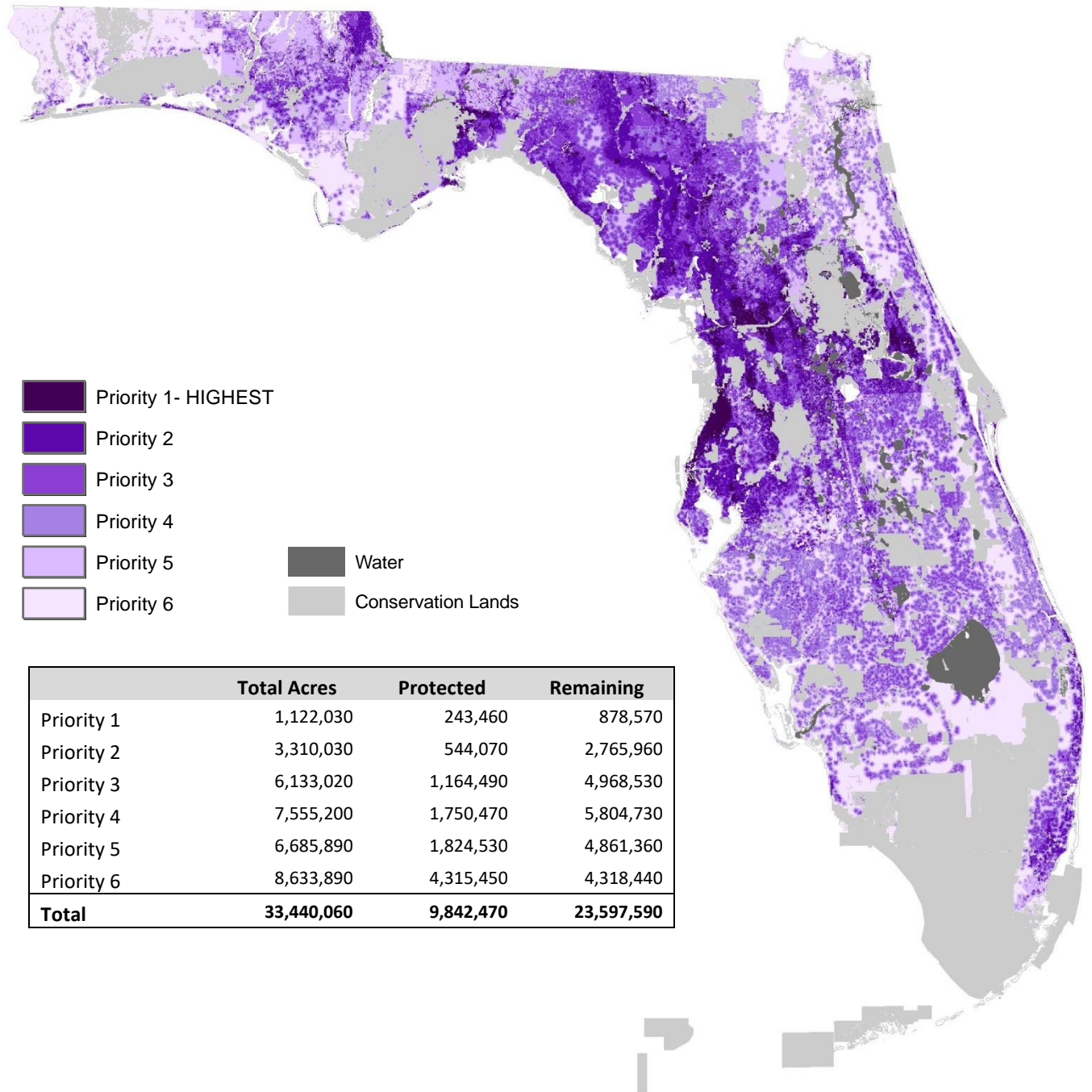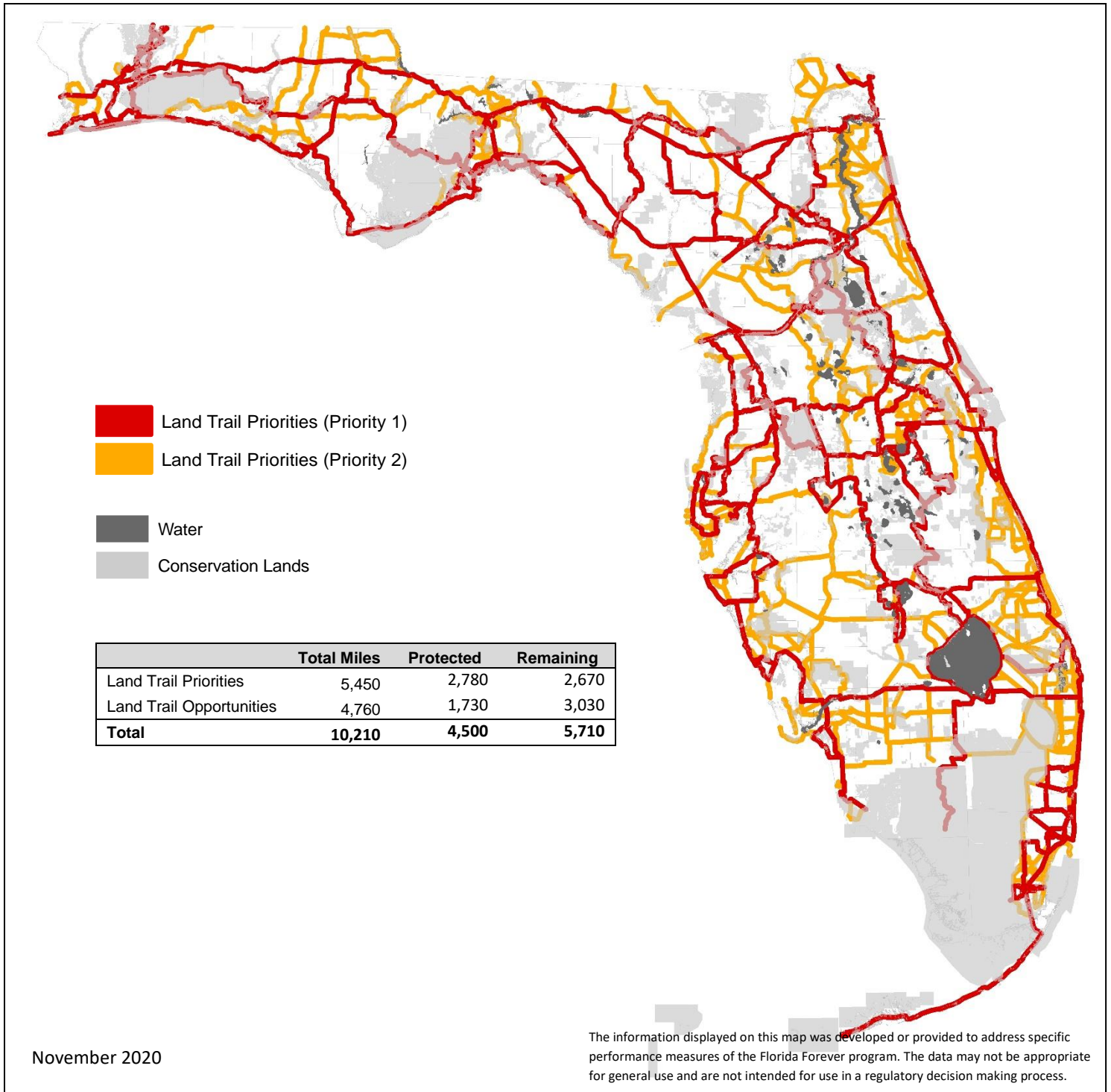- Priority 6
- Water
- Conservation Lands

November 2020

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Primary Source: Advanced Geospatial, Inc; Florida Natural Areas Inventory

Description: The ground water recharge data layer identifies areas of potential recharge important for natural systems and human use. The data are prioritized based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Recreational Trails

Legend:

- **Land Trail Priorities (Priority 1)** (red)
- **Land Trail Priorities (Priority 2)** (orange)
- **Water** (dark gray)
- **Conservation Lands** (light gray)

	Total Miles	Protected	Remaining
Land Trail Priorities	5,450	2,780	2,670
Land Trail Opportunities	4,760	1,730	3,030
Total	**10,210**	**4,500**	**5,710**

November 2020

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Primary Source: DEP/Office of Greenways and Trails

Description: The Recreational Trails data layer is based on land trail priorities and opportunities, including those for the Florida National Scenic Trail, identified in the Florida Greenways and Trails System Plan (2015 update). These trails are made up of existing, planned and conceptual non-motorized trails that form a connected set of linear recreational opportunities statewide. For more information: http://www.dep.state.fl.us/gwt/FGTS_Plan/default.htm.

Sustainable Forestry
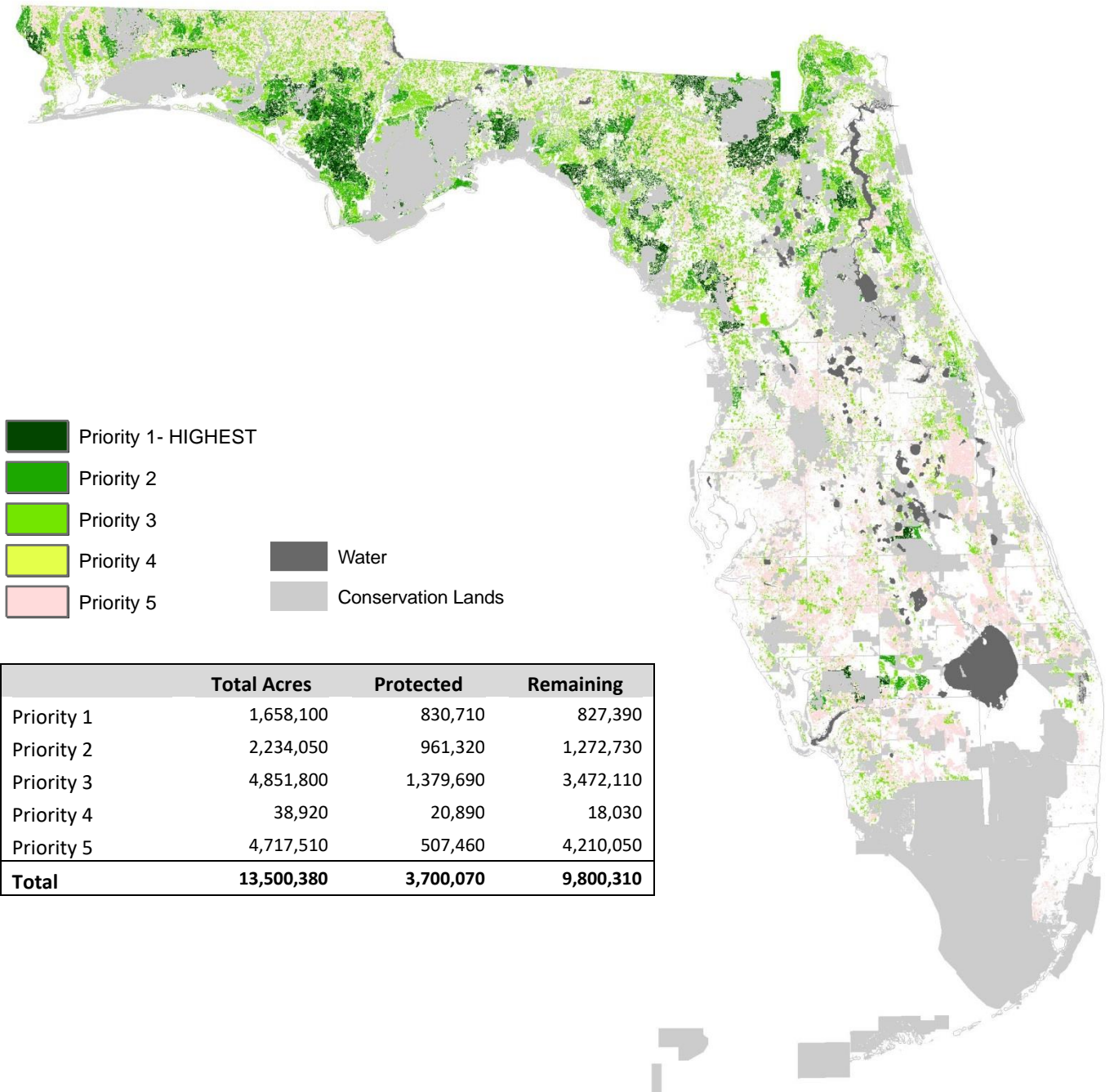
	Total Acres	Protected	Remaining
Priority 1	1,658,100	830,710	827,390
Priority 2	2,234,050	961,320	1,272,730
Priority 3	4,851,800	1,379,690	3,472,110
Priority 4	38,920	20,890	18,030
Priority 5	4,717,510	507,460	4,210,050
Total	**13,500,380**	**3,700,070**	**9,800,310**

Legend:
- Priority 1- HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Water
- Conservation Lands

November 2020

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Primary Source: Florida Forest Service; Florida Natural Areas Inventory

Description: The Sustainable Forestry data layer identifies existing pinelands (natural and planted) and former pinelands that are potentially available for forest management. Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Large tracts of natural pine on mesic soils (versus very dry or wet) that are within 50 miles of a mill receive the highest priority. Former pinelands that currently do not have trees receive the lowest priority. For more information see the Conservation Needs Assessment Technical Report: http://www.fnai.org/FlForever.cfm.

Species

Combined Strategic Habitat Conservation Areas and Rare Species Habitat Conservation Priorities

Legend:
- Priority 1- HIGHEST
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Priority 6
- Water
- Conservation Lands

	Total Acres	Protected	Remaining
Priority 1	2,285,430	1,465,980	819,440
Priority 2	1,555,070	1,237,680	317,390
Priority 3	9,453,240	5,925,740	3,527,500
Priority 4	5,559,000	1,609,240	3,949,750
Priority 5	2,701,570	232,900	2,468,670
Priority 6	2,274,560	176,770	2,097,790
Total	**23,828,870**	**10,648,310**	**13,180,540**

November 2020

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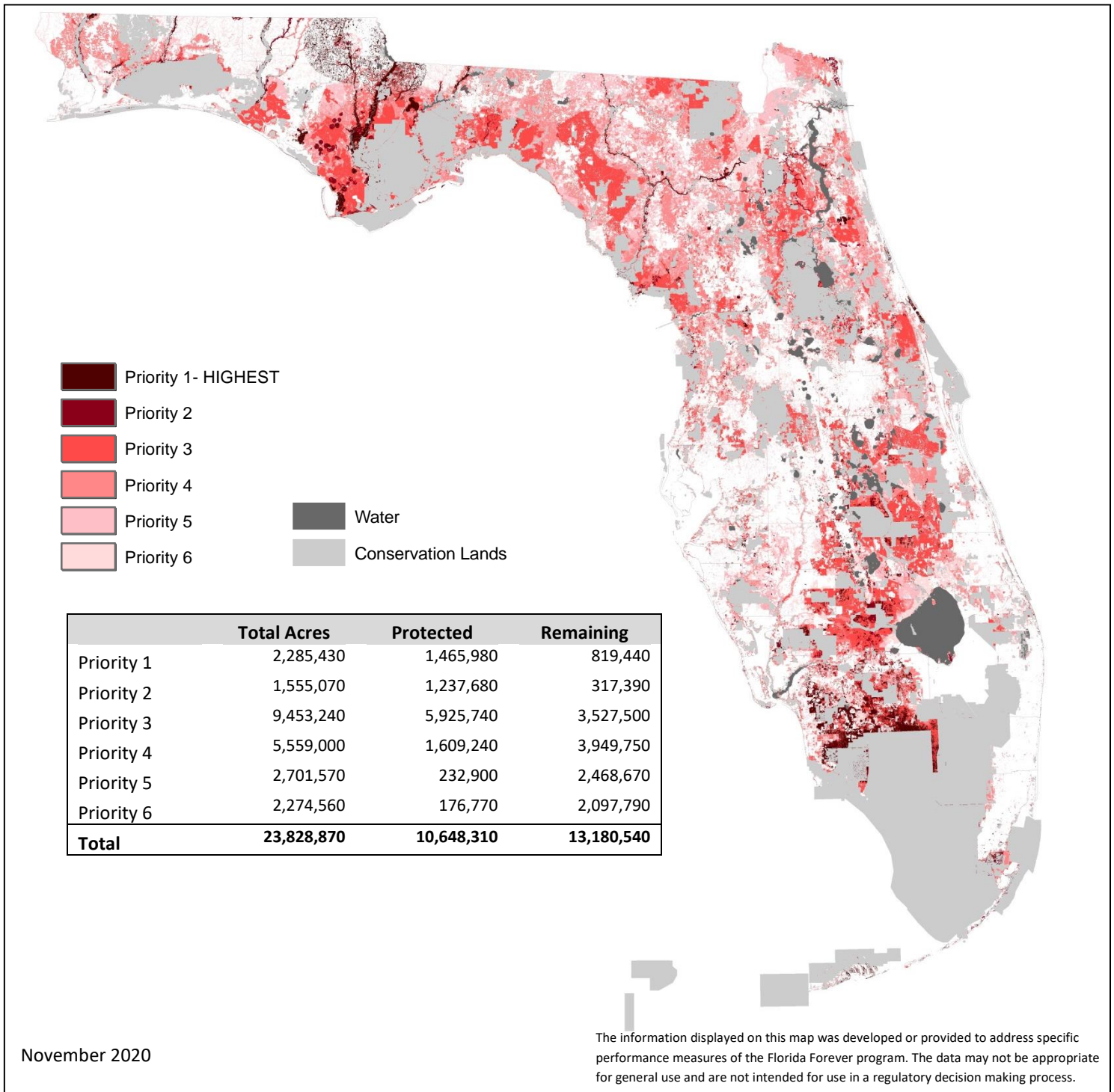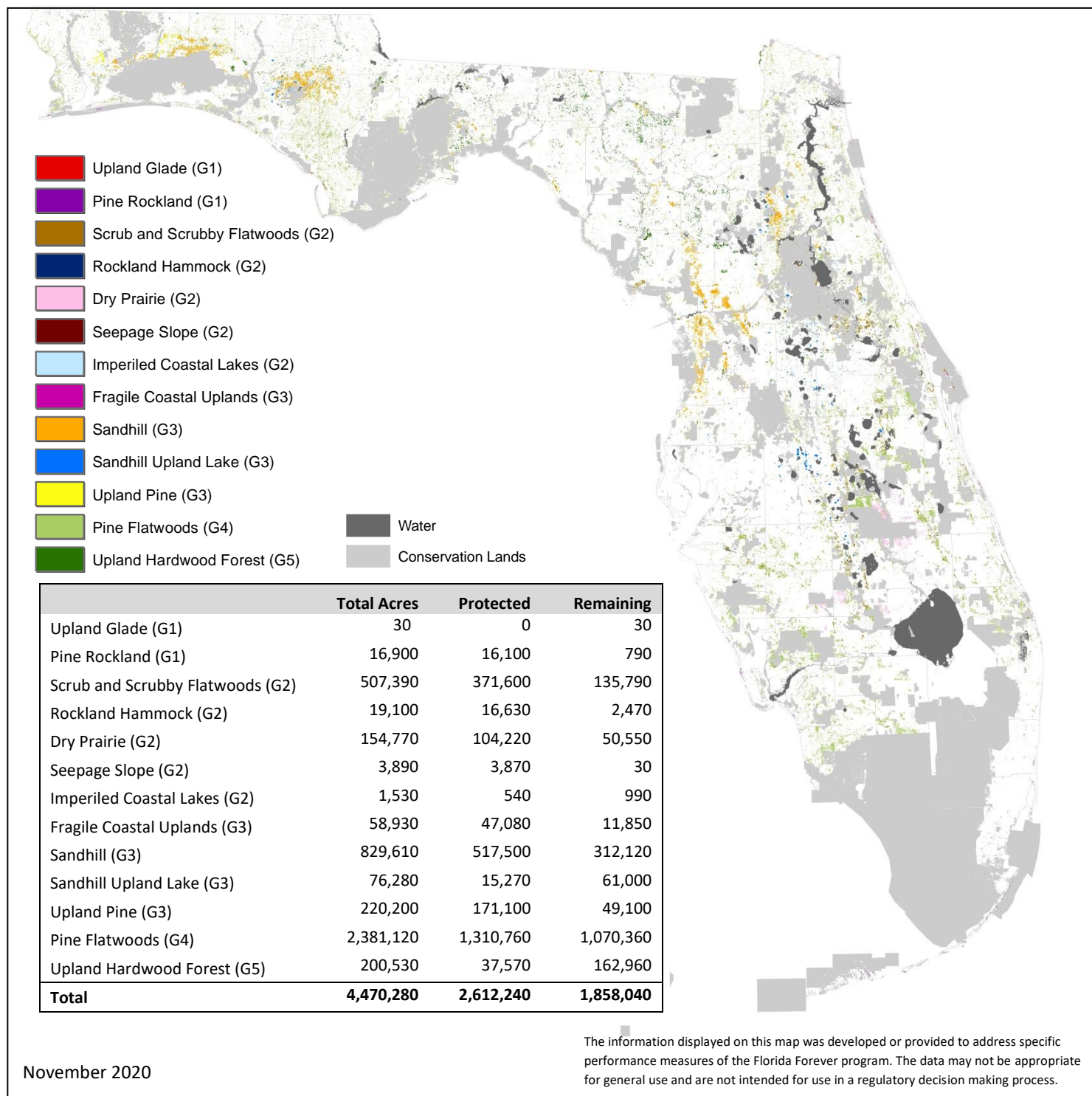
Primary Sources: Florida Fish and Wildlife Conservation Commission; Florida Natural Areas Inventory

Description: The Strategic Habitat Conservation Areas for Florida Forever and FNAI Habitat Conservation Priorities identify habitat for some of the same species. Twenty-eight species were included in both the final SHCA and FNAI habitat analyses. In order to minimize this redundancy the Species data layer combines information from these two layers. Please refer to the Decision Support Data Documentation (http://www.fnai.org/FlForever.cfm) for an explanation of how priority classes were assigned in the combination of the two data layers.

Natural Communities

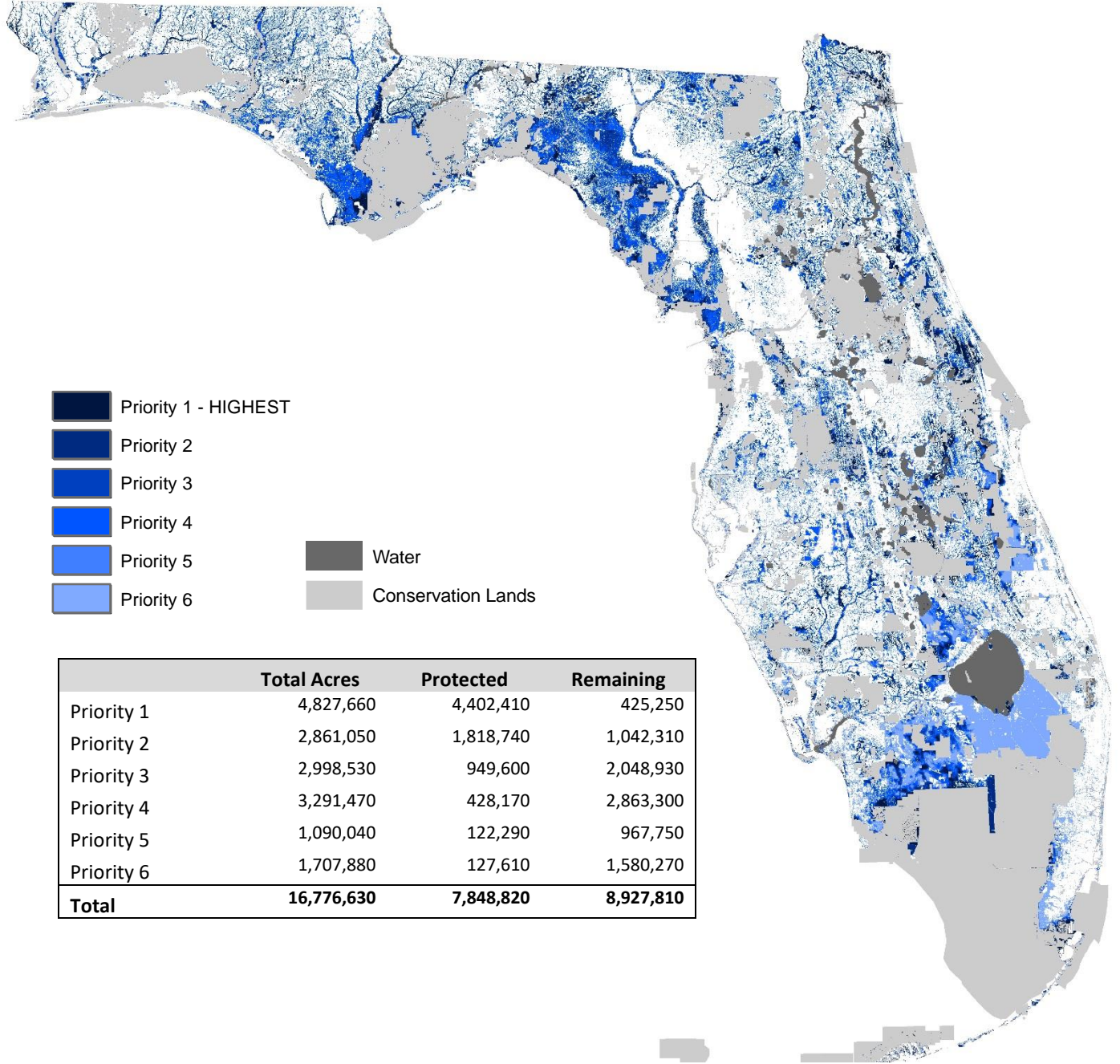## Combined Under-represented Ecosystems and Fragile Coastal Resources (Uplands)

Legend:
- Upland Glade (G1)
- Pine Rockland (G1)
- Scrub and Scrubby Flatwoods (G2)
- Rockland Hammock (G2)
- Dry Prairie (G2)
- Seepage Slope (G2)
- Imperiled Coastal Lakes (G2)
- Fragile Coastal Uplands (G3)
- Sandhill (G3)
- Sandhill Upland Lake (G3)
- Upland Pine (G3)
- Pine Flatwoods (G4)
- Upland Hardwood Forest (G5)
- Water
- Conservation Lands

	Total Acres	Protected	Remaining
Upland Glade (G1)	30	0	30
Pine Rockland (G1)	16,900	16,100	790
Scrub and Scrubby Flatwoods (G2)	507,390	371,600	135,790
Rockland Hammock (G2)	19,100	16,630	2,470
Dry Prairie (G2)	154,770	104,220	50,550
Seepage Slope (G2)	3,890	3,870	30
Imperiled Coastal Lakes (G2)	1,530	540	990
Fragile Coastal Uplands (G3)	58,930	47,080	11,850
Sandhill (G3)	829,610	517,500	312,120
Sandhill Upland Lake (G3)	76,280	15,270	61,000
Upland Pine (G3)	220,200	171,100	49,100
Pine Flatwoods (G4)	2,381,120	1,310,760	1,070,360
Upland Hardwood Forest (G5)	200,530	37,570	162,960
Total	**4,470,280**	**2,612,240**	**1,858,040**

November 2020

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Primary Source: FNAI

Description: The Natural Community data layer is made up of natural communities under-represented on conservation lands, and fragile coastal resources, which include fragile coastal uplands and imperiled coastal lakes. Mangrove and Salt Marsh (G5) are included in the Functional Wetlands data layer. This data layer is prioritized based on the Global Rank of the natural communities. Please refer to the Decision Support Data Documentation (http://www.fnai.org/FlForever.cfm) for an explanation of how this dataset is used in Florida Forever analyses.

Wetlands/Floodplain

Combined Functional Wetlands and Natural Floodplain

Priority 1 - HIGHEST

Priority 2

Priority 3

Priority 4

Priority 5

Priority 6

Water

Conservation Lands

	Total Acres	Protected	Remaining
Priority 1	4,827,660	4,402,410	425,250
Priority 2	2,861,050	1,818,740	1,042,310
Priority 3	2,998,530	949,600	2,048,930
Priority 4	3,291,470	428,170	2,863,300
Priority 5	1,090,040	122,290	967,750
Priority 6	1,707,880	127,610	1,580,270
Total	**16,776,630**	**7,848,820**	**8,927,810**

November 2020

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Primary Source: FNAI

Description: The Wetlands/Floodplain data layer identifies lands that protect both functional wetlands and natural floodplain. Prioritization is based on overlap with Land Use Intensity index and FNAI Potential Natural Areas. Please refer to the Decision Support Data Documentation (http://www.fnai.org/FlForever.cfm) for more detailed explanation of how priority classes were assigned in the combination of the wetlands and floodplain layers.