Water Control Structures in Hillsborough County

The Southwest Florida Water Management District maintains and operates 81 water control structures throughout the District’s 16-county region. These structures help provide flood protection, manage lake water levels and prevent salt water from flowing up freshwater streams and creeks. Thirty-three of these structures are located in Hillsborough County.

1. Lake Armistead Water Conservation Structure
   The Armistead structure is located south of Lake Armistead in northwestern Hillsborough County on Rocky Creek at Hammock Woods Drive. The structure’s gates can be remotely operated to maintain water levels in the lake and the adjacent wetlands.

2. Bay Lake Water Conservation Structure
   The Bay structure is located in Carrollwood, between Bay Lake and Lake Ellen, on Moran Road. The structure’s gates can be remotely operated to manage water levels on Bay Lake.
3. **Lake Carroll Water Control Structure**  
The Carroll structure is located at the south end of Lake Carroll on Orange Grove Drive in Carrollwood. The structure’s stop logs can be added or removed to help manage water levels in Lake Carroll.

4. **Channel A Salinity Barrier and Flood Control Structure**  
The Channel A structure is located between Oldsmar and Tampa, just north of West Hillsborough Avenue, on the Channel A drainage canal, originally known as Brushy Creek. The structure’s gates operate automatically to help prevent saltwater intrusion into the freshwater system and can be used to lower upstream levels during rain events. The gates can also be remotely operated, and a generator supplies backup electrical power to the structure in the event of a power outage.

5. **Channel G Salinity Barrier and Flood Control Structure**  
The Channel G structure is located in Town ‘N’ Country, on the Channel G drainage canal at River Road. The structure’s gates operate automatically to help prevent saltwater intrusion into the fresh water system and can be used to lower upstream levels during rain events. The gates can also be remotely operated, and a generator supplies backup electrical power to the structure in the event of a power outage.

6. **Crescent Lake Water Conservation Structure**  
The Crescent structure is located in Keystone, between Crescent Lake and Island Ford Lake, on Crescent Road. The structure’s gate can be remotely operated to help manage water levels in Crescent Lake.

7. **Lake Elaine Water Conservation Structure**  
The Elaine structure is located in Carrollwood on the south end of the south pool of Lake Elaine. The structure’s stop logs can be added or removed to help manage water levels in Lake Elaine.

8. **Lake Ellen-Lipsey Water Conservation Structure**  
The Ellen-Lipsey structure is located in Carrollwood, east of Orange Grove Drive, on Sweetwater Creek. The structure’s gates can be remotely operated to manage water levels on Lake Ellen and Lake Lipsey.

9. **Flint Creek Water Conservation Structure**  
The Flint Creek structure is located in Thonotosassa on Flint Creek at the end of Kelso Road. The structure’s remotely operated gates help maintain water levels on the 800-acre Lake Thonotosassa, Hillsborough County’s largest lake. A generator supplies backup electrical power to the structure in the event of a power outage.

10. **Lake Hanna Water Conservation Structure**  
The Hanna structure is located in Lutz on the Hanna Lake outfall canal near the lake’s southeast shore. The structure’s stop logs can be added or removed to help maintain lake levels.

11. **Island Ford Water Conservation Structure**  
The Island Ford structure is located south of Odessa on Brooker Creek, just west of Island Ford Lake. The structure’s gates can be remotely operated to help maintain water levels in Island Ford Lake.

12. **Keene 1 Water Conservation Structure**  
The Keene 1 structure is located in Lutz, just east of US 41, on Sunset Lane. Two people equipped with waders are needed to add or remove stop logs to help maintain water levels in Lake Keene for fresh water storage, groundwater recharge and recreation.

13. **Keene 2 Water Conservation Structure**  
The Keene 2 structure is located in Lutz, just east of US 41, on Sunset Lane. Two people equipped with waders are needed to add or remove stop logs to help maintain water levels in Lake Keene.

14. **Keene 3 Water Conservation Structure**  
The Keene 3 structure is located in Lutz, south of Sunset Lane and east of US 41. Two people equipped with waders are needed to add or remove stop logs to help manage water flowing from the Keene 1 structure to Lake Stemper.
15. Lake Kell Water Conservation Structure
The Kell structure is located on Newberger Road just east of US 41, in Lutz. The structure’s stop logs can be added or removed to help maintain levels in Lake Kell.

The Keystone structure is located south of Odessa on Lutz Lake Fern Road, south of Tarpon Springs Road. The structure’s gates can be manually operated to help maintain water levels in Keystone Lake.

17. Lake Magdalene Water Conservation Structure
The Magdalene structure is located in Carrollwood on Ehrlich Road, just east of North Dale Mabry Highway. The structure’s gates can be remotely operated to manage water levels on Lake Magdalene.

18. Medard Dam
The Medard Dam is located along Turkey Creek Road in eastern Hillsborough County. The dam is maintained to provide groundwater recharge, recreational opportunities to the public and freshwater storage. The reservoir and dam also provide a limited measure of flood protection to residents living in the floodplain downstream of the dam. The dam’s gates can be remotely operated to maintain levels in the reservoir, and a generator supplies backup electrical power to the structure in the event of a power outage. Like many of the District’s critical structures, an emergency action plan is maintained to warn residents in the unlikely event that the structure is compromised and downstream flooding is imminent. The dam is regularly inspected by District staff members, and the District follows Federal Emergency Management Agency dam safety guidelines in maintaining the structure.

19. Lake Pretty Water Conservation Structure
The Pretty structure is located in Citrus Park on the Rocky Creek outlet of Pretty Lake. The structure’s gates can be remotely operated to manage water levels on Lake Pretty.

20. S-155 Flood Control Structure
The S-155 structure is located north of Temple Terrace on the Hillsborough River, just upstream of I-75. The structure’s gates can be remotely operated to help provide flood protection on the lower Hillsborough River by diverting flow to the Lower Hillsborough Flood Detention Area and through the Tampa Bypass Canal into Tampa Bay. A generator supplies backup electrical power to the structure in the event of a power outage.

21. S-159 Lower Flood Control Structure
The S-159 structure is located east of Temple Terrace on the Tampa Bypass Canal near Harney Road. The third in a set of three structures, it helps regulate flood waters flowing from the Lower Hillsborough Flood Detention Area. The reinforced concrete spillway has no moving gates.

22. S-159 Middle Flood Control Structure
The middle S-159 structure is located east of Temple Terrace on the Tampa Bypass Canal near Harney Road. The second in a set of three structures, it helps regulate floodwaters flowing from the Lower Hillsborough Flood Detention Area. The reinforced concrete spillway has no moving gates.

23. S-159 Upper Flood Control Structure
The upper S-159 structure is located east of Temple Terrace on the Tampa Bypass Canal near Harney Road. The first in a set of three structures, its remotely operated gates help control flood releases from the Lower Hillsborough Flood Detention Area during flood events. A generator supplies backup electrical power to the structure in the event of a power outage.

24. S-160 Flood Control Structure
The S-160 structure is located in southeast Tampa on the Tampa Bypass Canal system, just north of SR 60. The gated spillway can be remotely operated for flood control and to maintain water levels in the Tampa Bypass Canal. A generator supplies backup electrical power to the structure in the event of a power outage.

25. S-161 Flood Control Structure
The S-161 structure is located south of Temple Terrace on the Harney Canal, part of the Tampa Bypass Canal system, just off Harney Road in Tampa. The structure’s gates can be remotely operated to assist in the regulation of the outflow of the Hillsborough River Reservoir Dam into the canal system. A generator supplies backup electrical power to the structure in the event of a power outage.
26. S-162 Flood Control Structure
The S-162 structure is located just east of Tampa on the Tampa Bypass Canal, just north of Martin Luther King Boulevard. The structure’s gates can be remotely operated to regulate the outflow of the Hillsborough River Reservoir Dam and the outflow of the upper Tampa Bypass Canal. A generator supplies backup electrical power to the structure in the event of a power outage.

27. S-163 Flood Control Structure
The S-163 structure is located northeast of Temple Terrace on the Tampa Bypass Canal, just south of Morris Bridge Road. The structure’s manually operated gate can be closed during flood events to force water from Cow House Creek down the Tampa Bypass Canal.

28. Saddleback Lake Water Conservation Structure
The Saddleback structure is located south of Saddleback Lake on Berger Road in Lutz. The structure’s stop logs can be added or removed to help manage water levels in Saddleback Lake and Round Lake.

29. Sherry’s Brook Water Conservation Structure
The Sherry’s Brook structure is located in the Kensington Estates community in Lutz. Two people equipped with waders are needed to add or remove stop logs to help maintain water levels on Lake Keene.

30. Lake Stemper Water Conservation Structure
The Stemper structure is located off Debuel Road, near Maniscalco Elementary School, in Lutz. Two people equipped with waders are needed to add or remove stop logs to help maintain water levels in Lake Stemper.

31. Tampa Bypass Canal
The 14-mile-long Tampa Bypass Canal begins just northeast of Temple Terrace on Cow House Creek in the Lower Hillsborough Flood Detention Area. It passes south, crossing I-4 at East Hillsborough Avenue and SR 60 near Orient Road, turns west and empties into McKay Bay at the mouth of the Palm River. Built to divert floodwaters around Temple Terrace and downtown Tampa, the project was one component of the Four River Basins drainage project that commenced following widespread flooding in the wake of Hurricane Donna in 1960. The canal system includes multiple canals, structures and monitoring systems, including the S-155, S-160, S-161, S-162, S-163 and S-159 Lower, Middle and Upper structures.

32. Trout Creek Flood Control Structure
The Trout Creek structure is located north of Temple Terrace, just off I-75, in the Lower Hillsborough Wilderness Preserve’s Wilderness Park Off Road Trails System. During flood conditions, the structure’s gate can be manually operated to impound floodwaters in the Lower Hillsborough Flood Detention Area.

33. White Trout Water Conservation Structure
The White Trout structure is located west of Tampa on SR 580 just east of North Dale Mabry Highway, near the southeast shore of White Trout Lake. The structure’s stop logs can be added or removed to help manage water levels in the lake.