Appendix D

PRELIMINARY ALTERNATIVES DEVELOPMENT TABLE

TABLE 1

ALTERNATIVE	PRO	CON
Do nothing.	1.No additional construction 2.No impacts to ENP	1.Unacceptable safety concern, Tamiami Trail (Monroe County hurricane evacuation route) would be impacted by increased flows to NESRS under Modified Water Deliveries to ENP. 2.High O&M costs for FDOT.
New Tamiami Trail alignment north of existing road.	1.Will place roadway north of area affected by backwater and north of L-29 borrow canal, while raising sub-grade of roadway to a higher elevation. This will prevent critical inundation of roadbed. 2.Traffic on current roadway will continue uninterrupted while new roadway is constructed on existing L-29 levee.	1.Inconsistent with Restudy alternatives which includes removing L-29 levee. 2.Impacts to Tigertail Camp. 3.L-29 levee was not designed for use as a roadway.
New Tamiami Trail alignment south of existing road.	1.Will raise sub-grade of roadway to a higher elevation, preventing critical inundation of roadbed. 2.Could provide a secondary storage area north of Tamiami Trail to allow a more controlled release to NESRS. 3.Traffic on current roadway will continue while new roadway is constructed to the south.	1.Potential disturbance of ENP land during construction. 2.Would encroach upon ENP land due to FDOT's limited right-of-way. 3.Impacts to wood stork nesting. 4.Loss of wetland habitat. 5.Impact to businesses south of road.
Raising low portions of Tamiami Trail.	1.Will raise sub-grade at low portions of the roadway to a higher elevation, preventing critical inundation of roadbed at these portions. 2.Will be relatively low cost due to raising of roadbed only in critical zones.	1.Creates complications due to rerouting of traffic around construction zones. 2.Potential for sub-grade inundation from backwater effects will remain at portions of the roadway due to downstream vegetation and roadway elevation not being increased at these portions.
Incorporation of bridge spans on current Tamiami Trail alignment.	1.Will place portions of the roadway above areas affected by backwater eliminating damages caused by backwater. 2.Bridge spans south of S-355A and S-355B will allow more direct discharges to NESRS. 3.Provides for greatest operational flexibility of discharges to NESRS.	1.Relatively high cost. 2.Creates complications due to rerouting of traffic around construction zones. 3.Potential for sub-grade inundation from backwater effects will remain at portions of the roadway due to downstream vegetation and bridge spans not being placed at these portions.
Placement of underground distribution pipe south of Tamiami Trail.	1.Extends discharge of water to NESRS over a larger area (east and west), reducing backwater effects. 2.Eliminates need to modify roadway.	1.Discharge will not be distributed evenly to NESRS (discharge will seek path of least resistance). 2.Potential disturbance of ENP land during construction. 3.Will encroach upon ENP land due to FDOT's limited right-of-way. 4.Potential for sub-grade inundation from backwater effects will remain due to downstream vegetation and roadway elevation not being increased. 5.Impacts to wood stork nesting. 6.Loss of wetland habitat. 7.Impact to businesses south of road.

TABLE 1 (cont'd)

ALTERNATIVE	PRO	CON
Placement of additional culverts in Tamiami Trail.	1.Relatively low cost.	1.Creates complications due to rerouting of traffic around construction zones. 2.Potential for sub-grade inundation from backwater effects will remain due to downstream vegetation and roadway elevation not being increased.
Raising entire 11-mile length of Tamiami Trail.	1.Will raise entire length of roadway sub-grade to a higher elevation, preventing critical inundation of roadbed over entire roadway length. 2.Provides for additional operational flexibility of discharges to NESRS.	1.Creates complications due to rerouting of traffic around construction zones. 2.High cost.
Clearing of exotic vegetation south of Tamiami Trail.	1.Low cost. 2.No work will be done on Tamiami Trail roadway, eliminating need for rerouting of traffic.	1.Vegetation remaining could continue to hinder flows to NESRS. 2.ENP preference to not allow removal of vegetation or disturbance of Park land. 3.Temporary impact to ENP ecosystem due to mobilization of machinery used for vegetation removal. 4.Possible waterborne transport of exotics' seed source due to clearing activities.
Move westbound lane of Tamiami Trail to L-29 levee.	1.Will provide sufficient right-of-way for eastbound lane minimizing need for realignment of roadway. 2.Depending upon construction sequence could provide minimal detouring of traffic. 3.Could provide passing lanes for both lanes of traffic. 4.No impacts to ENP.	1.High cost. 2.Impact to businesses south of road. 3.L-29 levee was not designed for use as a roadway. 4.Inconsistent with Restudy alternatives which includes removing L-29 levee. 5.Complications placing roadway on S-355 structures. 6.Impact to Tiger Tail camp.
Combination of; bridge spans, and raising portions of Tamiami Trail	1.Will raise sub-grade at low portions of the roadway to a higher elevation, preventing critical inundation of roadbed at these portions. 2.Will place portions of the roadway above areas affected by backwater eliminating damages caused by backwater. 3.Bridge spans south of S-355A and S-355B will allow more direct discharges to NESRS.	1.Creates complications due to rerouting of traffic around construction zones.

TABLE 1 (cont'd)

Combination of; bridge spans and clearing of exotic vegetation south of Tamiami Trail.	1.Will place portions of the roadway above areas affected by backwater eliminating damages caused by backwater. 2.Bridge spans south of S-355A and S-355B will allow more direct discharges to NESRS. 3.Provides for greatest operational flexibility of discharges to NESRS. 4.Vegetation clearing and correct site selection for bridges will avoid limited right-of-way issue and avoid raising roadway.	1.Creates complications due to rerouting of traffic around construction zones. 2.Vegetation remaining could continue to hinder flows to NESRS. 3.ENP preference to not allow removal of vegetation or disturbance of Park land. 4.Temporary impact to ENP ecosystem due to mobilization of machinery used for vegetation removal. 5.Possible waterborne transport of exotics' seed source due to clearing activities.
Combination of; bridge spans, raising portions of Tamiami Trail, placement of additional culverts, and clearing of exotic vegetation.	1.Will raise sub-grade at low portions of the roadway to a higher elevation, preventing critical inundation of roadbed at these portions. 2.Will place portions of the roadway above areas affected by backwater eliminating damages caused by backwater. 3.Bridge spans south of S-355A and S-355B will allow more direct discharges to NESRS. 4.Provides for greatest operational flexibility of discharges to NESRS.	1.Relatively high cost. 2.Creates complications due to rerouting of traffic around construction zones.