Milestone	Risk Number	Date	Scoping Choice or Event	Risk and its cause	Risk Type	Consequence	Consequence rating	Evidence for Consequence rating	Likelihood rating	Evidence for likelihood rating	Uncertainty rating	Evidence for Uncertainty Rating	Risk Rating	Risk Management Options	Conclusion/ Recommendation	POC	Affected Study Component	Outcome	Notes
SMART milestone or IPR (for summary sheet only)	*Id number*	*Date entry was last updated*	*This is the scoping choice (task, decision, problem, question, issue) or event (action, hazard or opportunity) that is to be managed.*	*Briefly identify the risk. Considering the entry in column* ***D****, what can go wrong as a result of the scoping choice or event and how can it happen?*	*Select: Study Risk (Analytical error, study delays, study cost increase, poor planning decision), Implementation Risk (schedule and cost of implementation, redesign), or Outcome Risk (hazard risk and project performance risk)*	*Describe the consequence of the column* ***E*** *risk. If things do "go wrong" in the way described what is the specific consequence for the study or project outcomes? (List the most significant consequence first if more than one.)*	*If the most significant consequence in column* ***G*** *occurs what is its potential magnitude?*	*Enter specific evidence used to support the consequence rating in column* ***H.*** *If relying on an event from a previous study, list study and date.*	*What is the likelihood that the most significant consequence in column* ***G*** *will occur?*	*Enter specific evidence used to support the likelihood rating in column* ***J.*** *If relying on an event from a previous study, list study and date.*	*How great is the uncertainty about either the consequence or likelihood of the risk identified in column* ***E ?***	**Added by PDT, not a required column	*Qualitative risk rating from lookup table.*	*Enter options for reducing the risk and estimate time/cost impacts associated with the management option.*	*Identify any preferred recommendation for managing the risk. Tolerating the risk is the default option.*	*Name(s) of person(s) assessing the task and responsible for task*	*What other analyses of the study are affected by this risk? For example, what other analyses use outputs from the scoping choice as their input.*		
TSP	Geo 1	26-Nov-12	Sufficient sand source not available for TSP	Volumes needed increase over known borrow area volumes	Study Risk	Release of TSP to public, completion of NEPA document.	L	Additional time and study cost needed to find more material. Project costs could increase, TSP could have a BCR <1.	L	Likely a study cost, not a significant project cost.	L	Volumes needed are small and material has been found offshore that is suitable.	Low	Verify volumes needed, conduct additional borrow studies during PED.	Compare volumes following final plan selection.		Public and agency reviews.	Final volumes will verify if sufficient volumes exist.	
TSP	ENV 2	26-Nov-12	Mitigation for environmental impacts will increase the cost of the TSP	Previously unknown resources are found	Study Risk	Selection of the TSP.	M	The selection of the TSP would change or TSP would have a BCR <1 and not be in the Federal interest to support.	L	A BCR is in the 1 to 2 range now, sponsor would be very unhappy with no project.	L	Two surveys have been conducted for nearshore rock with none close to placement location. No other significant resources are thought to be impacted.	Low	Coordinate the TSP with resource agencies. Conduct additional studies or surveys during PED.	Coordinate the TSP with resource agencies.		Public and agency reviews.	Increased awareness of project.	Cultural resource survey of the borrow area has not been done yet so there is some unknown in this area of the study. Piping plover not currently in the regional BO which could add time to agency review.
TSP	H&H 3	26-Nov-12	The physical processes (waves, tides, currents driving erosion) driving damages do not accurately reflect the problem.	If damages are understated, costs would increase to maintain same level of benefits.	Study Risk	Selection of the TSP.	M	The selection of the TSP would change. Future project costs could increase and cause a Sec 902 bust.	M	Plan selection is sensitive to net benefits.	M	Although Beach-FX is certified, several versions have been released and subsequent changes in benefits calculations.	Medium	Properly cite data sources & version of model used. Involve PCX and model developer during evaluation. Full ATR of model inputs and outputs. Evaluating output based	Find qualified ATR reviewers thru PCX for new model.		ATR and policy reviews.	Finding the right reviewer will ensure the schedule is met and quality is achieved.	PDT already involved with model developers, have collected FDOT data to callibrate damages.
TSP	H&H 4	26-Nov-12	A new version of Beach-FX model is released.	HQ requires use of latest model version.	Study Risk	Completion of final report.	L	Additional study time is needed.	L	Schedule slip could be several months. Model is sequential, making updates laborious.	L	Precedence with other modeling efforts, have to move forward at some point. Previous versions have not changed selected plan.	Low	Get vertical team concurrence through risk register.	Discuss risk item with vertical team.		Final report	Concurrence from HQ on risk item.	Last model revisions based on specific needs which have now been satisfied and resolved.
TSP	H&H 5	26-Nov-12	Use of the historical Sea Level Change curve to select TSP	TSP would change if intermediate or high level were evaluated	Study Risk	Completion of final report.	L	Future project costs could increase if higher levels of sea level rise, Benefits may also increase	L	Costs in the future have less impact on BCR, not likely for BCR<1	L	Vulnerability analysis was conducted and found due to high land elevations, infrastructure is not as sensitive to sea level rise	Low	Run the final array for intermediate and high level. Include vulnerability analysis in the draft report. Run the TSP at intermediate and high to check BCR.	Run the final array for intermediate and high level. Include vulnerability analysis in the draft report. Run the TSP at intermediate and high to check BCR.		TSP presentation, Draft report preparation.	Can accomplish within schedule.	
TSP	PL 6	26-Nov-12	Concurrent reviews.	SMART planning includes concurrent ATR, policy, legal, public, and IEPR if required.	Study Risk	Completion of public review and final report.	M	The wrong TSP is released to the public and another review is required later.	L	Schedule slip could be several months.	M	Final array plans are very similar in scale, so any changes would be minor and likely be within range of alternatives included in NEPA.	Low	Comprehensive presentation of alternative evaluation and plan selection prior to and at TSP meeting. Clear concise documents.	Superior quality documents and presentations.		Report writing.	Concensus from vertical team that TSP is correct and ready to go public.	
TSP	PL 7	26-Nov-12	IEPR exclusion.	HQ denies request for IEPR exclusion, add study time to contract out and conduct IEPR	Study Risk	Completion of final report.	M	Additional time is needed for IEPR contract.	L	Schedule slip could be several months.	L	Project cost well below $45M, no triggers, no EIS.	Low	Discuss with vertical team immediately. Write IEPR exclusion memo for SAD/HQ.	Discuss with vertical team immediately. Write IEPR exclusion memo for MSC/HQ.		Review Plan, Final Report	Concurrence from HQ on IEPR exclusion.	
TSP	PL 8	26-Nov-12	Selection of LPP.	Draft report contains NED plan as TSP, selection of LPP would need further design, costs, benefits and creation of an ASA briefing package.	Study Risk	Public and policy reviews.	M	Additional study time is needed.	M	Schedule slip could be several months and redo public review, although ASA concurrence is not needed until final report submittal.	M	Sponsor has limited funds to add expensive LPP, but is highly interested in wider beach. Some alternatives are BCR<1 so not eligible for LPP.	Medium	Discuss TSP with sponsor and present realistic project costs for LPP. Get concurrence from sponsor on TSP.	Get concurrence from sponsor on TSP.		Additional meetings prior to TSP meeting.	Can accomplish within schedule.	
TSP	RE 9	26-Nov-12	Identification of Real Estate needed to implement TSP	50 year perpetual easements normally acquired plus temporary construction easements for staging. Wrong project limits are identified.	Study Risk	Completion of final report.	L	Project costs could be understated, more legal requirements could delay report approvals.	L	Easements are normally low cost items for beach nourishment. Legal changes could delay report approval.	L	Sponsor working with locals to inform of project details.	Low	Real estate review of TSP requirements, policy and legal review completion.	Clearly discuss RE requirements in draft report, include in TSP presentation.		TSP presentation, Draft report preparation.	Can accomplish within schedule.	
TSP	PUB 110	26-Nov-12	Public Comments are Significant to draft report	Highly vocal residents that want their own pet project. Opposed to all dredging projects. Could convince sponsor to withdraw support for project.	Study Risk	Completion of final report.	M	Added time needed for public review period. If no support, report will not be completed.	M	Additional study time is a minor impact but precendence of DOT project stopped by public outcry. Strong public support for alternative to dredging.	H	Majority of public supports but small group is highly vocal and disruptive.	Medium	More meetings with sponsor and consider public meetings. Inform sponsor of requirement for sponsor letter of support. Encourage sponsor to seek out all public groups, not just	More meetings with sponsor and consider public meetings. Inform sponsor of requirement for sponsor letter of support.		Public and agency reviews.	Can accomplish within schedule.	