

**Regional Integrated Loop System -
Kings Highway to Shell Creek Loop
(Phase 1A Interconnect)**

Route Selection

PRMRWSA Board Meeting

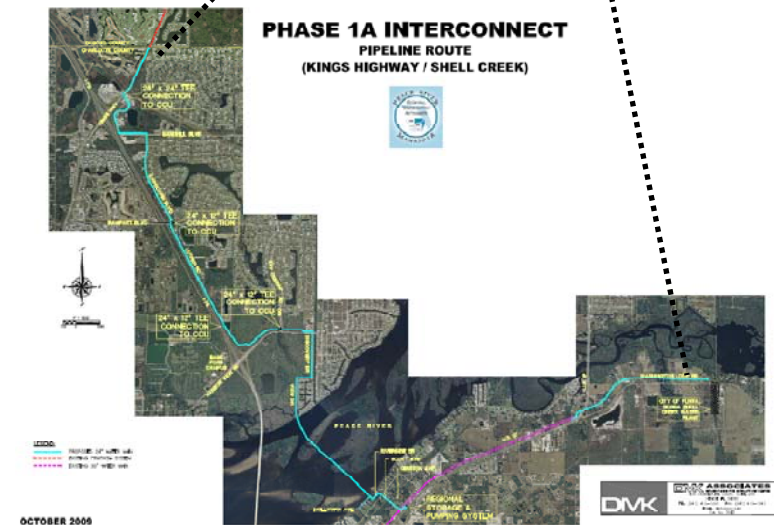
April 7, 2010

Outline

1. Property Acquisition Through Eminent Domain Requires Formal Board Action on the Pipeline Alignment
2. Preferred Pipeline Alignment is Described in Resolution 2010-02 and the Supporting Documentation:
 - a. Memorandum and Attached Materials
 - b. Route Selection Presentation by Project Consultant, DMK Associates
3. Staff Recommendation on Resolution 2010-02

Project Objectives

- Cost-effective and feasible interconnect from regional delivery system on Kings Hwy at Charlotte / Desoto County line to the City of Punta Gorda Water Treatment Facility
- Transfer up to 6 MGD bi-directionally
- Regional water service to CCU system



Background

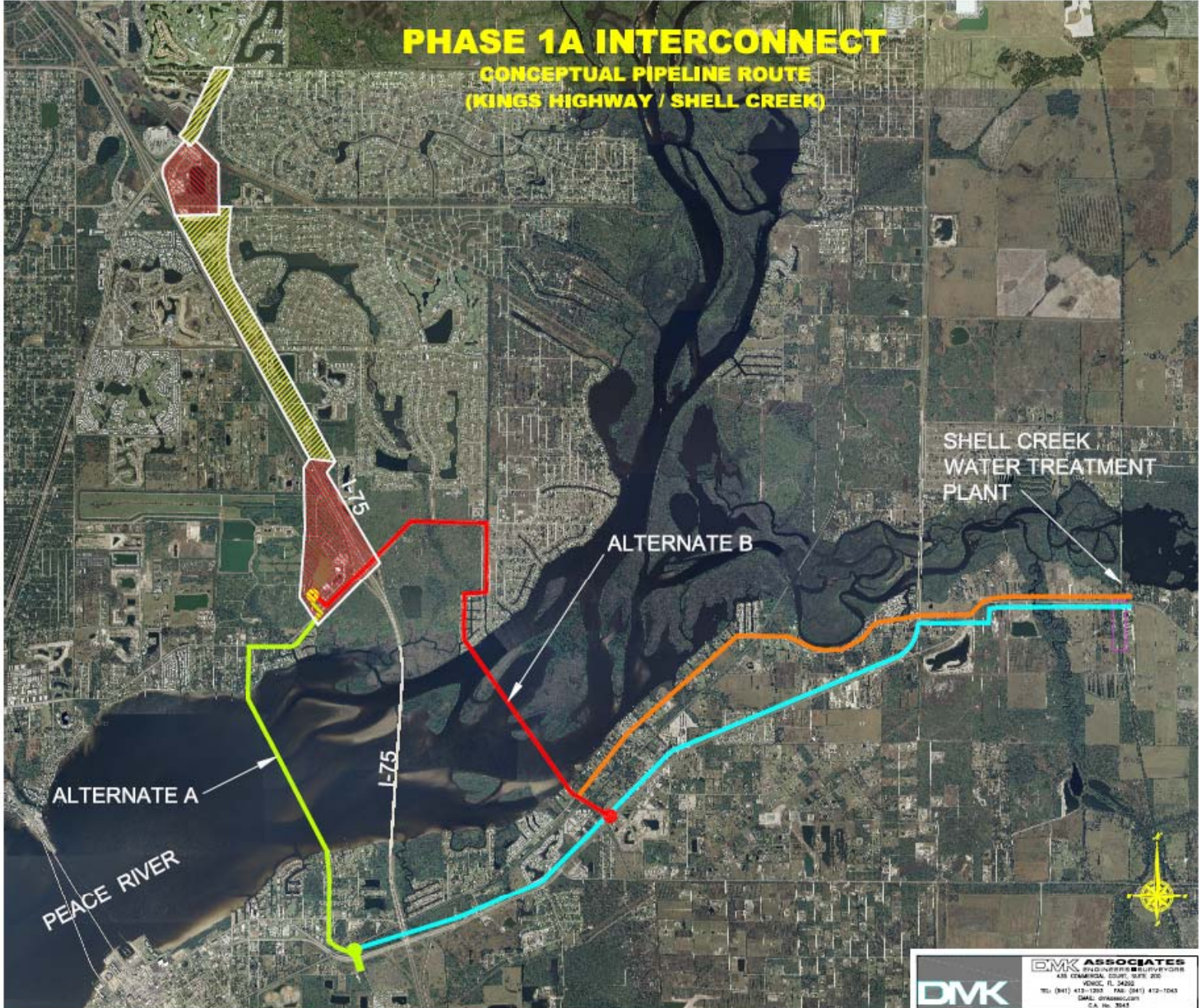
- Conceptual Design was Conducted for Charlotte County in 2006
- Project Became Regional and was Transferred to PRMRWSA in July, 2007 as the Phase 1A Regional Interconnect
- Route Evaluation Conducted in 2 phases
 - Initial Consideration : Conceptual Route Analysis
 - Refined : Preliminary Phase 1A Design

Conceptual Route Evaluation

- Conceptual Design Report 2006
 - Conceptual Alignment and Crossing Location
 - Evaluation of 2 Route Corridors and River Crossings
 - Between I-75 and US-41
 - East of I-75
- Recommended Alternative: Crossing East of I-75

PHASE 1A INTERCONNECT

CONCEPTUAL PIPELINE ROUTE
(KINGS HIGHWAY / SHELL CREEK)



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Conceptual Route Evaluation Factors

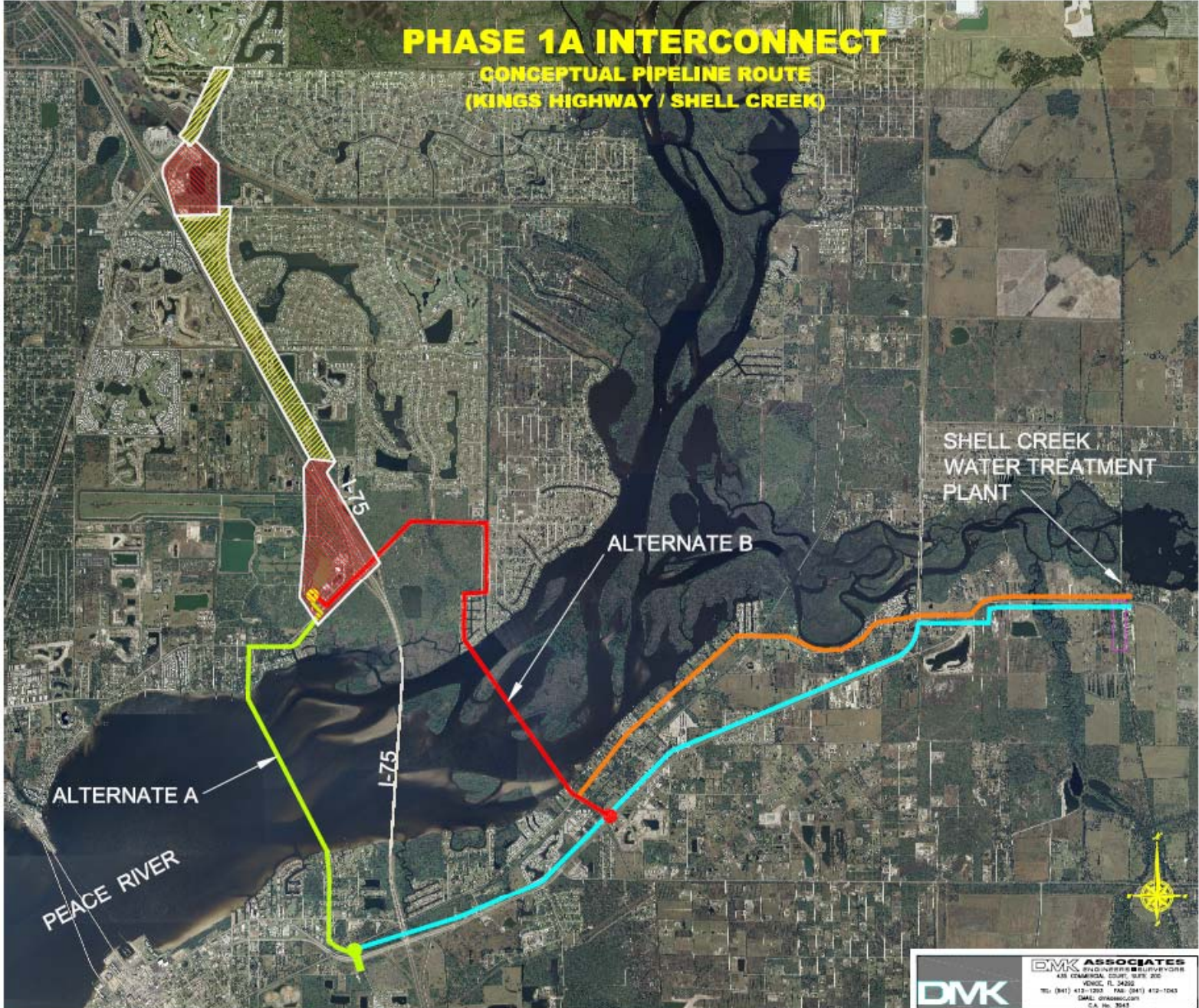
Evaluation Factor	Criteria Incorporated Into Factor
Project Cost	<ul style="list-style-type: none"> •Construction Costs <ul style="list-style-type: none"> •Pipe and Installation •Land Acquisition •Mitigation •Road and Utility Crossings •Continuing Costs
Environmental Factors	<ul style="list-style-type: none"> •Environmental Impacts •Wetland / Protected Habitat Impacts •Permitting Requirements
Long Range Area Planning	<ul style="list-style-type: none"> •Distance from Existing Water Mains •Consistency with Future Projects •Consistency with Long Range Planning
Safety / Constructability	<ul style="list-style-type: none"> •Construction Complexity <ul style="list-style-type: none"> •Safety Issues •Utility Conflicts •Geotechnical Issues •Shoreline Access
Property Issues	<ul style="list-style-type: none"> •Construction and Maintenance Accessibility <ul style="list-style-type: none"> •Use of existing Public Right of Way •Access Road Requirements •Adjacent Parcels •Pump Station Sites
Public Input	<ul style="list-style-type: none"> •Presentations <ul style="list-style-type: none"> • Charlotte County Board of County Commissioners • City of Punta Gorda City Council •Construction Impact and Route Security

Conceptual Design Ranking of Alternates

Evaluation Factor	Weight of Factor	ALTERNATE A	ALTERNATE B
		Weighted Points	Weighted Points
Project Costs	5	25	22.5
Environmental Factors	5	15	20
Long Range Area Planning	6	49	55
Safety / Constructability	7	25	32
Property Issues	8	28	36
Public Input	4	31	35
Total Weighted Points		173	200.5

PHASE 1A INTERCONNECT

CONCEPTUAL PIPELINE ROUTE
(KINGS HIGHWAY / SHELL CREEK)



SHELL CREEK
WATER TREATMENT
PLANT

ALTERNATE B

ALTERNATE A

PEACE RIVER

I-75

I-75

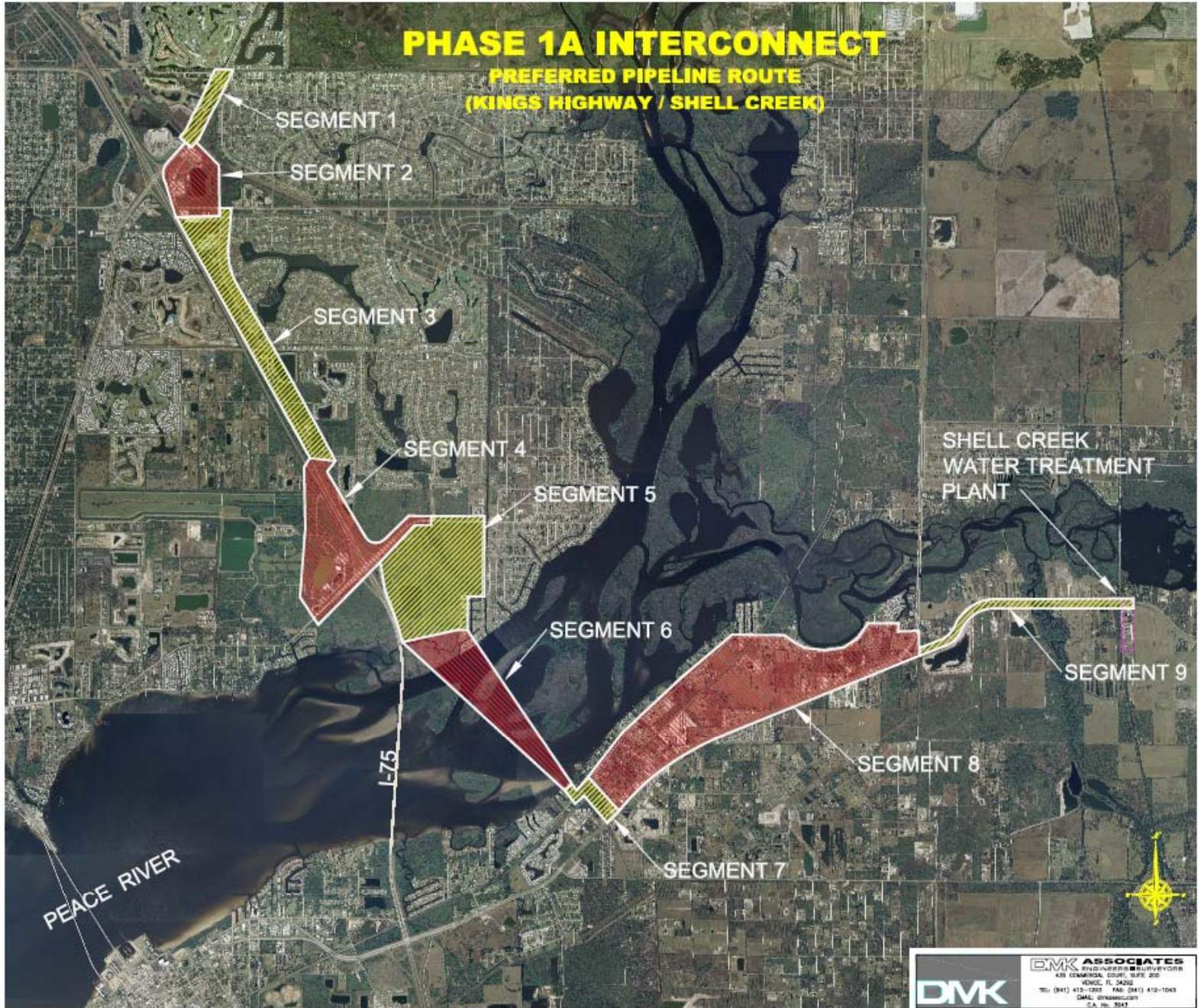
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Preliminary Route Evaluation

- Phase 1A Preliminary Engineering Report
 - Considered alternatives within the conceptual Alignment Corridor
 - Northern Leg evaluation alignments East and West of I-75 and access to river crossing.
 - Evaluated Two River Crossing alignments and two construction methods.
 - Southern leg evaluation of alternatives to Shell Creek WTP.
- Evaluation Methodology
 - Conceptual Alignment divided into 9 Segments
 - Several Alternatives Evaluated for Each Segment
 - Each Alternative Rated Against Criteria.

PHASE 1A INTERCONNECT

PREFERRED PIPELINE ROUTE
(KINGS HIGHWAY / SHELL CREEK)



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Preliminary Route Evaluation Factors

Evaluation Factor	Criteria Incorporated Into Factor
Project Cost	<ul style="list-style-type: none"> •Construction Costs <ul style="list-style-type: none"> •Pipe and Installation •Land Acquisition •Mitigation •Road and Utility Crossings •Continuing Costs
Environmental Factors	<ul style="list-style-type: none"> •Environmental Impacts •Wetland / Protected Habitat Impacts •Permitting Requirements
Long Range Area Planning	<ul style="list-style-type: none"> •Distance from Existing Water Mains •Consistency with Future Projects •Consistency with Long Range Planning
Safety / Constructability	<ul style="list-style-type: none"> •Construction Complexity <ul style="list-style-type: none"> •Safety Issues •Utility Conflicts •Geotechnical Issues •Shoreline Access
Property Issues	<ul style="list-style-type: none"> •Construction and Maintenance Accessibility <ul style="list-style-type: none"> •Use of existing Public Right of Way •Access Road Requirements •Adjacent Parcels •Pump Station Sites
Public Input	<ul style="list-style-type: none"> •Presentations <ul style="list-style-type: none"> •Charlotte County Board of County Commissioners •City of Punta Gorda City Council •CHNEP Presentation •Construction Impact and Route Security

Preliminary Design Ranking of Alternates




<i>Weighted Scores for the Integrated Loop System Phase 1A Interconnect Alignment Alternatives</i>																							
Factor	Weight	1A	1B	2A	2B	2C	2D	3A	3B	4A	4B	4C	5A	5B	5C	6A	6B	7A	7B	7C	8A	8B	8C
Project Costs	20	180	200	150	170	180	200	200	170	180	200	190	160	190	160	200	190	180	180	200	200	40	120
Environmental Factors	12	72	100	108	116	116	28	120	88	80	88	80	52	84	52	52	20	112	120	120	116	24	80
Long Range Area Planning	2	16	16	14	8	6	20	18	20	14	16	16	16	16	18	16	16	14	16	18	16	14	12
Safety and Constructability	5	35	40	50	50	50	20	40	45	35	45	45	35	25	15	35	35	50	50	50	50	25	20
Property Issues	5	45	45	25	40	50	10	50	25	50	30	40	45	30	15	35	35	30	50	50	50	5	40
Public Input	6	59	50	51	51	50	24	57	50	31	42	44	15	20	20	30	10	48	58	60	60	23	29
Total Weighted Score	50	407	451	398	435	452	302	485	398	390	421	415	323	365	280	368	306	434	474	498	492	131	301

Notes:

1. Highlighted Segments Reflect Preferred Alignment
2. Segment 9 Utilized Existing Water Main Corridor – No Alternative Evaluated

PHASE 1A INTERCONNECT PREFERRED ALIGNMENT KINGS HIGHWAY / SHELL CREEK



LEGEND:
 PROPOSED 24" WATER MAIN
 EXISTING FIRMIDA SYSTEM
 EXISTING 30" WATER MAIN

OCTOBER 2009

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Recommended Alignment

- 86% of pipe route in pre-existing Right-of-Way, only 14% would require acquisitions of easements from private property
- Marine open-trench construction approach for river crossing
- Includes use of deliveries from City of Punta Gorda 30-inch diameter pipeline south of river
- Includes acquisition of Charlotte County 24-inch diameter Kings Highway pipeline from Desoto County Line
- Includes storage and pumping facilities

Preferred Phase 1A Interconnect Alignment Staff Recommendation

Motion to approve Resolution No. 2010-02 *'A Resolution Determining the Necessity to Construct a Transmission Pipeline and Appurtenant Facilities Connecting the PRMRWSA Regional Delivery System on Kings Highway at the DeSoto/Charlotte County Line to the City of Punta Gorda Water Treatment Facility on South Washington Loop Road in Charlotte County'*.