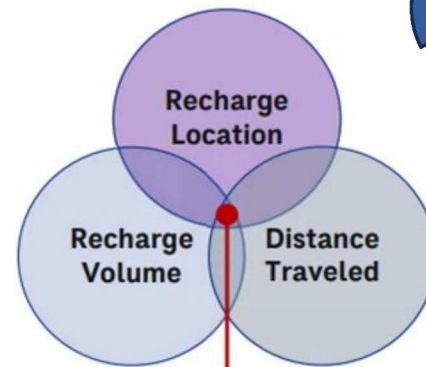
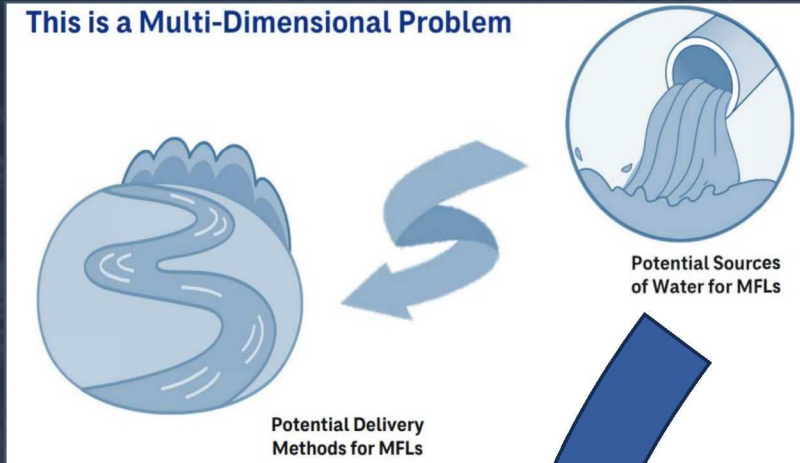


North Florida Regional Recharge Project - Conceptualization



- Cooperative funding agreement with SJRWMD, SRWMD, FDEP and four NE Florida utilities
- Evaluate potential project options for the North Florida Partnership area

This is a Multi-Dimensional Problem



Value:

- MFL Benefit per Cost or per Mile
- Partnership/funding potential
- Other factors

Comparative process to select project that results in aquifer recharge and flow restoration in Outstanding Florida Springs

DEFINITIONS OF ALTERNATIVES					PRINCIPAL QUANTITATIVE FACTORS							QUALITATIVE FACTORS			OTHER QUANTITATIVE FACTORS		OTHER CONSIDERATIONS	
					Net Benefit Infrastructure (C/F)	Net Benefit Sewer (C/F)	Average Water/Sewer System Balance Storage				ANCILLARY BENEFITS		IMPLEMENTATION EASE	PROJECT DEVELOPMENT TIME	OPERATIONAL COMPLEXITY	SOURCE WATER RELIABILITY		POTENTIAL FOR REGIONAL BENEFITS (C/S)
ID #	Source	Recharge Site (see map)	Volume (MGD)	Recharge Efficiency	Recharge Method	Capital Cost (High/Low)	Operating Cost (High/Low)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	Net Present Value (NPV)	
1	Buckman WWF Full	Recharge Site: Target Balance	25	100%	Injection		508.2	12.5	508.2	12.5	22.2	+High Cost	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	20-25 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	1.5	
2		Recharge Site: Target Balance (see map)	25	90%	Wellhead		425.5	9.0	425.5	9.0	22.2	+High Cost	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	20-25 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	0.9	
3	Buckman – Southeast (High Treatment) Option	Recharge Site: Target Balance (see map)	40	90%	Wellhead		857.0	15.0	708.8	6.6	33.4	+High Cost	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	20-25 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	1.6	Treatment wetland in Duval County, 1500 Acres on Peterson Tract accessible to SRWMD. Future flexibility with SRWMD. Could use SRWMD or injection to recharge zones, as well as multiple recharge sites (not currently available). High cost is SRWMD recharge with SRWMD + AEC treatment, low cost is injection with only wellhead treatment.
4	(SR) WWTF Transfer	Recharge Site: High Influence – Move to Kirby PZ	3	90%	Wellhead		88.1	2.5	80.3	0.3	33.5	+High Cost	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	10-20 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	0.11	At least one of these alternatives to Kirby PZ, the other is not a recommended balance site.
5		Recharge Site: Target Balance (see map)	3	80%	Wellhead		77.6	2.5	43.1	0.3	31.1	+High Cost	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	10-20 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	0.10	
10	Suwannee River	Recharge Site: Lake City Parcel 1	40	100%	Injection		784.1	23.9	633.9	14.6	23.2	None	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	10-20 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	3.5	Request from SRWMD to evaluate 80% flowback available for flows above the median. How much time to the excess water available from these recharge?
11		Recharge Site: Shilohville 1	40	100%	Injection		718.0	23.0	567.8	14.6	21.8	None	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	10-20 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	2.5	Request from SRWMD to evaluate 80% flowback available for flows above the median. How much time to the excess water available from these recharge?
12	NT Black Creek	Recharge Site: Santa Fe High Influence	5.2	100%	Injection		273.9	7.3	228.5	4.4	34.8	None	• Recharging (H) • Public (J) • Land acquisition (H) • Compliance (H)	10-20 Years	• Compliance (H) • Recharging (H) • Phasing (H)	100%	0.2	Request from SRWMD to evaluate 80% flowback available for flows above the median. How much time to the excess water available from these recharge?