

JAMESTOWN ASSESSMENT - APPENDIX I - MANAGE summary results

STANDARD - NO BMPS		Study Area Land Use Indicators							Riparian Indicators				
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Study Area	Scenario	Acres	% Sewer	% High Intensity	% Im-pervious	% Forest	% Wetland	% Forest & wetland	RIP % HILU	RIP%Im-pervious	RIP % Forest	RIP % Wetland	RIP % Forest and Wetland
				Land Use									
Jamestown	Current Land Use	6186	14%	12%	13%	25%	13%	38%	11%	12%	20%	27%	46%
Jamestown Shores	Current Land Use	765	0%	11%	21%	15%	10%	25%	9%	18%	14%	30%	43%
Carr Pond Basin	Current Land Use	210	0%	5%	6%	25%	23%	48%	0%	0%	17%	73%	90%
Watson Pond Basin	Current Land Use	450	0%	12%	4%	32%	24%	56%	3%	2%	23%	73%	96%
Jamestown WHPA	Current Land Use (no water)	260	0%	10%	9%	30%	18%	48%	5%	3%	20%	66%	86%

Following future all standard high impervious

Jamestown	Future Land Use	6185	14%	12%	14%	16%	13%	30%	11%	12%	18%	27%	45%
Jamestown Shores	Future Land Use	744	0%	18%	24%	10%	11%	20%	9%	18%	13%	30%	43%
Carr Pond Basin	Future Land Use	210	0%	5%	8%	13%	23%	36%	0%	0%	15%	73%	89%
Watson Pond Basin	Future Land Use	450	0%	9%	6%	27%	24%	50%	3%	2%	23%	73%	96%
Jamestown WHPA	Future Land Use (with water)	287	0%	9%	9%	17%	17%	33%	5%	3%	19%	66%	85%

Alternative Assumptions and Management Options

Jamestown Low Ag	Current Land Use	6186	14%	12%	13%	25%	13%	38%	11%	12%	20%	27%	46%
Carr Pond Basin Low Ag	Current Land Use	210	0%	5%	6%	25%	23%	48%	0%	0%	17%	73%	90%
Watson Pond Basin LowAg	Current Land Use	450	0%	12%	4%	32%	24%	56%	3%	2%	23%	73%	96%
Jamestown High Fert	Current Land Use	6185	14%	12%	13%	25%	13%	38%	11%	12%	20%	27%	46%
Jamestown High Fert	Future Land Use	6185	14%	12%	14%	16%	13%	30%	11%	12%	18%	27%	45%
Jamestown Shores High Pets	Current Land Use	765	0%	11%	21%	15%	10%	25%	9%	18%	14%	30%	43%
Jamestown Shores High Fert	Current Land Use	765	0%	11%	21%	15%	10%	25%	9%	18%	14%	30%	43%
Jamestown Shores High Fert & HighPets	Current Land Use	765	0%	11%	21%	15%	10%	25%	9%	18%	14%	30%	43%

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Study Area	Scenario	Acres	% Sewer	% High Intensity Land Use	% Impervious	% Forest	% Wetland	% Forest & wetland	RIP % HILU	RIP%Impervious	RIP % Forest	RIP % Wetland	RIP % Forest and Wetland
Jamestown Shores HighFert	Future Land Use	744	0%	18%	24%	10%	11%	20%	9%	18%	13%	30%	43%
Alternative Assumptions - low impervious													
Jamestown	Current Land Use New Low Impervious	6185	14%	12%	8%	25%	13%	38%	11%	8%	20%	27%	46%
Jamestown Shores	Current Land Use New Low Impervious	765	0%	11%	12%	15%	10%	25%	9%	11%	14%	30%	43%
Jamestown	Future Land Use Low Imperv Final	6185	14%	12%	10%	16%	13%	30%	11%	8%	18%	27%	45%
Jamestown Shores	Future Land Use low Imperv	744	0%	18%	15%	10%	11%	20%	9%	11%	13%	30%	43%
Jamestown WHPA	Future Land Use no water (corrected)	264	0%	10%	10%	18%	18%	36%	5%	3%	19%	66%	85%
Jamestown WHPA	Current Land UseNoWater	260	0%	10%	9%	30%	18%	48%	5%	3%	20%	66%	86%

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Jamestown Shores	Current Land Use (823 systems)	765	0%	11%	21%	15%	10%	25%	9%	18%	14%	30%	43%
Jamestown Shores	Current, Denite 1/4acre or less (823 systems, 270 denite)	765	0%	11%		15%	10%	25%	9%	-13%	14%	30%	43%
Jamestown Shores	Current, Denite Buffers (823 systems, 91 denite)	765	0%	11%		15%	10%	25%	9%	7%	14%	30%	43%
Jamestown Shores	Future Land Use, 100% Dev (1215 systems)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future Land UseALLDenite 1215 systems	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future No Dev <1.5' (1217-113~1101 systems)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future Denite all.No Dev <18" hwt (1101 systems, all denite)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future DeniteNewHWT 1.5to3.5, No Dev <18"(1101 systems, 132 denite)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%

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STANDARD - NO BMPS		Study Area Land Use Indicators							Riparian Indicators				
Study Area	Scenario	Acres	% Sewer	% High Intensity Land Use	% Impervious	% Forest	% Wetland	% Forest & wetland	RIP %	RIP%	RIP %	RIP %	RIP %
				HILU					Impervious	Forest	Wetland	Forest and Wetland	
Jamestown Shores	Future DeniteAll HWT 1.5to3.5,No Dev <18"(1103 systems, 413 denite)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future DeniteAll<1/4acre (1215 systems,547denite)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%
Jamestown Shores	Future Denite New only (1215 systems, 394 denite)	744	0%	18%	30%	10%	11%	20%	9%	18%	13%	30%	43%

NOTE: All current, future and bmps all high impervious except where noted.

Runoff and nutrient loading estimates based on local RIGS land use and soils data, local research on nitrogen leaching, and assumptions from literature review.

Nutrient loading estimates represent potential sources entering runoff or groundwater recharge.

Nutrient removal in surface or groundwater is not quantified but depends on multiple factors such as extent and location of developed land, extent of wetlands and forest, soil types, . and undeveloped shoreline buffers

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STANDARD - NO BMPS		Estimated Nutrient Loading					Estimated Nitrate-N sources to groundwater recharge						SOIL hydrologic groups			
		NO3N in GW Recharge mg/l	NO3N to GW recharge lbs/ac/yr	N SW runoff lbs/ac/yr	Total N to study area lbs/ac/yr	% N in SW runoff from Atm.	P to SW lbs/ac/yr	Septic Systems	Lawn Fert.	Agri. Fert	Pet Waste	Other	% A	% B	% C	% D
Study Area	Scenario															
Jamestown	Current Land Use	2.6	7.9	4.7	12.6	1.4%	0.9	48%	18%	25%	3%	6%	0%	1%	90%	10%
Jamestown Shores	Current Land Use	7.1	20.7	4.7	25.4	0.4%	1.3	81%	11%	0%	5%	2%	0%	0%	89%	11%
Carr Pond Basin	Current Land Use	2.4	6.6	3.3	9.9	31.0%	0.5	75%	12%	0%	5%	7%	0%	0%	86%	14%
Watson Pond Basin	Current Land Use	1.9	6.8	5.4	12.2	0.0%	0.7	7%	3%	79%	0%	10%	0%	0%	86%	14%
Jamestown WHPA	Current Land Use (no water)	1.9	6.7	3.2	9.9	0.0%	0.6	74%	12%	0%	5%	10%	0%	0%	89%	11%
Following future all standard high imperv																
Jamestown	Future Land Use	3.4	10.5	4.5	15.0	1.5%	1.0	62%	16%	15%	3%	3%	0%	1%	90%	10%
Jamestown Shores	Future Land Use	10.3	29.2	5.1	34.2	0.4%	1.4	85%	9%	0%	6%	1%	0%	0%	90%	10%
Carr Pond Basin	Future Land Use	2.7	7.4	3.3	10.7	31.4%	0.6	75%	16%	0%	5%	4%	0%	0%	97%	3%
Watson Pond Basin	Future Land Use	1.6	5.7	4.1	9.8	0.1%	0.6	21%	12%	58%	1%	8%	0%	0%	86%	14%
Jamestown WHPA	Future Land Use (with water)	2.4	6.8	3.5	10.4	21.2%	0.7	74%	16%	0%	5%	5%	0%	0%	90%	10%
Alternative Assumptions and Man																
Jamestown Low Ag	Current Land Use	2.0	6.2	4.7	10.9	1.4%	0.9	60%	23%	5%	3%	8%	0%	1%	90%	10%
Carr Pond Basin Low Ag	Current Land Use	2.4	6.6	3.3	9.9	31.0%	0.5	75%	12%	0%	5%	7%	0%	0%	86%	14%
Watson Pond Basin LowAg	Current Land Use	0.6	2.3	5.4	7.7	0.0%	0.7	21%	9%	38%	1%	30%	0%	0%	86%	14%
Jamestown High Fert	Current Land Use	3.7	11.2	4.7	15.9	1.4%	0.9	33%	43%	18%	2%	5%	0%	1%	90%	10%
Jamestown High Fert	Future Land Use	4.7	14.6	4.5	19.0	1.5%	1.0	45%	40%	11%	2%	2%	0%	1%	90%	10%
Jamestown Shores High Pets	Current Land Use	7.8	22.8	4.7	27.5	0.4%	1.3	74%	10%	0%	14%	2%	0%	0%	89%	11%
Jamestown Shores High Fert	Current Land Use	9.0	26.2	4.7	30.9	0.4%	1.3	64%	30%	0%	4%	1%	0%	0%	89%	11%
Jamestown Shores High Fert & HighPets	Current Land Use	9.7	28.3	4.7	33.0	0.4%	1.3	59%	28%	0%	11%	1%	0%	0%	89%	11%

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STANDARD - NO BMPS		Estimated Nutrient Loading					Estimated Nitrate-N sources to groundwater recharge						SOIL hydrologic groups			
Study Area	Scenario	NO3N in GW Recharge mg/l	NO3N to GW recharge lbs/ac/yr	N SW runoff lbs/ac/yr	Total N to study area lbs/ac/yr	% N in SW runoff from Atm.	P to SW lbs/ac/yr	Septic Systems	Lawn Fert.	Agri. Fert.	Pet Waste	Other	% A	% B	% C	% D
Jamestown Shores HighFert	Future Land Use	12.4	35.2	5.1	40.2	0.4%	1.4	70%	24%	0%	5%	1%	0%	0%	90%	10%
Alternative Assumptions - low imperviou																
Jamestown	Current Land Use New Low Impervious	2.6	7.9	4.7	12.6	1.4%	0.9	48%	18%	25%	3%	6%	0%	1%	90%	10%
Jamestown Shores	Current Land Use New Low Impervious	7.1	20.7	4.7	25.4	0.4%	1.3	81%	11%	0%	5%	2%	0%	0%	89%	11%
Jamestown	Future Land Use Low Imperv Final	3.4	10.5	4.5	15.0	1.5%	1.0	62%	16%	15%	3%	3%	0%	1%	90%	10%
Jamestown Shores	Future Land Use low Imperv	10.3	29.2	5.1	34.2	0.4%	1.4	85%	9%	0%	6%	1%	0%	0%	90%	10%
Jamestown WHPA	Future Land Use no water (corrected)	2.2	7.4	3.1	10.6	3.3%	0.7	74%	16%	0%	5%	5%	0%	0%	90%	10%
Jamestown WHPA	Current Land UseNoWater	1.9	6.7	3.2	9.9	0.0%	0.6	74%	12%	0%	5%	10%	0%	0%	89%	11%

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Jamestown Shores	Current Land Use (823 systems)	7.1	20.7	4.7	25.4	0.4%	1.3	81%	11%	0%	5%	2%	0%	0%	89%	11%
Jamestown Shores	Current, Denite 1/4acre or less (823 systems, 270 denite)	6.3	18.3	4.7	4.7	0.4%	1.3	79%	13%	0%	6%	2%	0%	0%	89%	11%
Jamestown Shores	Current, Denite Buffers (823 systems, 91 denite)	6.8	19.9	4.7	4.7	0.4%	1.3	80%	12%	0%	5%	2%	0%	0%	89%	11%
Jamestown Shores	Future Land Use, 100% Dev (1215 systems)	10.4	29.2	5.1	34.3	0.4%	1.4	85%	9%	0%	6%	1%	0%	0%	83%	17%
Jamestown Shores	Future Land UseALLDenite 1215 systems	6.5	18.2	5.1	23.3	0.4%	1.4	76%	14%	0%	9%	1%	0%	0%	83%	17%
Jamestown Shores	Future No Dev <1.5' (1217-113~1101 systems)	9.7	26.7	5.1	31.8	0.4%	1.4	84%	10%	0%	5%	1%	0%	0%	83%	17%
Jamestown Shores	Future Denite all, No Dev <18" hwt (1101 systems, all denite)	6.1	16.7	5.1	21.8	0.4%	1.4	75%	15%	0%	9%	1%	0%	0%	83%	17%
Jamestown Shores	Future DeniteNewHWT 1.5to3.5, No Dev <18"(1101 systems, 132 denite)	9.3	25.6	5.1	30.6	0.4%	1.4	83%	10%	0%	6%	1%	0%	0%	83%	17%

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STANDARD - NO BMPS		Estimated Nutrient Loading					Estimated Nitrate-N sources to groundwater recharge						SOIL hydrologic groups			
		NO3N in GW Recharge mg/l	NO3N to GW recharge lbs/ac/yr	N SW runoff lbs/ac/yr	Total N to study area lbs/ac/yr	% N in SW runoff from Atm.	P to SW lbs/ac/yr	Septic Systems	Lawn Fert.	Agri. Fert.	Pet Waste	Other	% A	% B	% C	% D
Study Area	Scenario															
Jamestown Shores	Future DeniteAll HWT 1.5to3.5,No Dev <18"(1103 systems, 413 denite)	8.3	23.0	5.1	28.1	0.4%	1.4	82%	11%	0%	6%	1%	0%	0%	83%	17%
Jamestown Shores	Future DeniteAll<1/4acre (1215 systems,547denite)	8.6	24.2	5.1	29.3	0.4%	1.4	82%	11%	0%	7%	1%	0%	0%	83%	17%
Jamestown Shores	Future Denite New only (1215 systems, 394 denite)	9.1	25.6	5.1	30.7	0.4%	1.4	83%	10%	0%	6%	1%	0%	0%	83%	17%

NOTE: All current, future and bmps all high impervic
 Runoff and nutrient loading estimates based on loca
 Nutrient loading estimates represent potential sourc
 Nutrient removal in surface or groundwater is not qu
 and undeveloped shore

JAMESTOWN ASSESSMENT - APPENDIX I - MANAGE summary results

STANDARD - NO BMPS

SWAP

Estimated Water Budget / Runoff / Recharge

Study Area	Scenario	%SHWT <1.5-3.5'	%SHWT 1.5'-3.5'	%Restr.C, .2"/hr	% Erode	HILU on A soil	HILU on HWT <3.5'	# ISDS	ISDS /Acre	Precip Inches	ET Inches	Avail. Precip Inches	SW runoff Inches	Net	
														recharge Precip. Inches	ISDS recharge Inches
Jamestown	Current Land Use	39.0%	22%	79%	30%	0%	2%	1,532	0.25	40	18	22	8.9	13.1	0.4
Jamestown Shores	Current Land Use	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Carr Pond Basin	Current Land Use	44.0%	19%	61%	26%	0%	3%	69	0.33	40	18	22	10.2	11.8	0.5
Watson Pond Basin	Current Land Use	65.9%	31%	76%	15%	0%	7%	15	0.03	40	18	22	6.4	15.6	0.1
Jamestown WHPA	Current Land Use (no water)	58.4%	30%	74%	37%	0%	8%	84	0.32	40	18	22	6.7	15.3	0.5
Following future all standard high imperv															
Jamestown	Future Land Use	39.1%	22%	79%	30%	0%	2%	2,651	0.43	40	18	22	9.1	12.9	0.7
Jamestown Shores	Future Land Use	43.1%	27%	22%	15%	0%	2%	1,215	1.63	40	18	22	12.2	9.8	2.6
Carr Pond Basin	Future Land Use	44.0%	19%	61%	26%	0%	3%	77	0.37	40	18	22	10.6	11.4	0.6
Watson Pond Basin	Future Land Use	65.9%	31%	76%	15%	0%	7%	35	0.08	40	18	22	6.0	16.0	0.1
Jamestown WHPA	Future Land Use (with water)	52.9%	27%	74%	33%	0%	7%	95	0.33	40	18	22	10.1	11.9	0.5
Alternative Assumptions and Man															
Jamestown Low Ag	Current Land Use	39.0%	22%	79%	30%	0%	2%	1,532	0.25	40	18	22	8.9	13.1	0.4
Carr Pond Basin Low Ag	Current Land Use	44.0%	19%	61%	26%	0%	3%	69	0.33	40	18	22	10.2	11.8	0.5
Watson Pond Basin LowAg	Current Land Use	65.9%	31%	76%	15%	0%	7%	15	0.03	40	18	22	6.4	15.6	0.1
Jamestown High Fert	Current Land Use	39.1%	22%	79%	30%	0%	2%	1,531	0.25	40	18	22	8.9	13.1	0.4
Jamestown High Fert	Future Land Use	39.1%	22%	79%	30%	0%	2%	2,651	0.43	40	18	22	9.1	12.9	0.7
Jamestown Shores High Pets	Current Land Use	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown Shores High Fert	Current Land Use	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown Shores High Fert & HighPets	Current Land Use	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8

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STANDARD - NO BMPS **SWAP** **Estimated Water Budget / Runoff / Recharge**

Study Area	Scenario	%SHWT <1.5-3.5'	%SHWT 1.5'-3.5'	%Restr.C, .2"/hr	% Erode	HILU on A soil	HILU on HWT <3.5'	# ISDS	ISDS /Acre	Precip Inches	ET Inches	Avail. Precip Inches	SW runoff Inches	Net	
														recharge Precip. Inches	ISDS recharge Inches
Jamestown Shores HighFert	Future Land Use	43.1%	27%	22%	15%	0%	2%	1,215	1.63	40	18	22	12.2	9.8	2.6
Alternative Assumptions - low imperviou															
Jamestown	Current Land Use New Low Impervious	39.1%	22%	79%	30%	0%	2%	1,531	0.25	40	18	22	8.9	13.1	0.4
Jamestown Shores	Current Land Use New Low Impervious	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown	Future Land Use Low Imperv Final	39.1%	22%	79%	30%	0%	2%	2,651	0.43	40	18	22	9.1	12.9	0.7
Jamestown Shores	Future Land Use low Imperv	43.1%	27%	22%	15%	0%	2%	1,215	1.63	40	18	22	12.2	9.8	2.6
Jamestown WHPA	Future Land Use no water (corrected)	57.6%	30%	81%	36%	0%	8%	95	0.36	40	18	22	7.4	14.6	0.6
Jamestown WHPA	Current Land UseNoWater	58.4%	30%	81%	37%	0%	8%	84	0.32	40	18	22	6.7	15.3	0.5

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Jamestown Shores	Current Land Use (823 systems)	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown Shores	Current, Denite 1/4acre or less (823 systems, 270 denite)	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown Shores	Current, Denite Buffers (823 systems,91 denite)	41.9%	26%	8%	15%	0%	2%	823	1.08	40	18	22	10.9	11.1	1.8
Jamestown Shores	Future Land Use, 100% Dev (1215 systems)	43.1%	27%	22%	15%	0%	2%	1,216	1.63	40	18	22	12.2	9.8	2.6
Jamestown Shores	Future Land UseALLDenite 1215 systems	0.0%	27%	22%	15%	0%	2%	1,216	1.63	40	18	22	12.2	9.8	2.6
Jamestown Shores	Future No Dev <1.5' (1217-113~1101 systems)	43.1%	27%	22%	15%	0%	2%	1,102	1.48	40	18	22	12.2	9.8	2.4
Jamestown Shores	Future Denite all.No Dev <18" hwt (1101 systems, all denite)	0.0%	27%	22%	15%	0%	2%	1,102	1.48	40	18	22	12.2	9.8	2.4
Jamestown Shores	Future DeniteNewHWT 1.5to3.5,No Dev <18"(1101 systems, 132 denite)	0.0%	27%	22%	15%	0%	2%	1,104	1.48	40	18	22	12.2	9.8	2.4

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STANDARD - NO BMPS

SWAP

Estimated Water Budget / Runoff / Recharge

Study Area	Scenario	%SHWT <1.5-3.5'	%SHWT 1.5'-3.5'	%Restr.C, .2"/hr	% Erode	HILU on A soil	HILU on HWT <3.5'	# ISDS	ISDS /Acre	Precip Inches	ET Inches	Avail. Precip Inches	SW runoff Inches	Net	
														recharge Precip. Inches	ISDS recharge Inches
Jamestown Shores	Future DeniteAll HWT 1.5to3.5,No Dev <18"(1103 systems, 413 denite)	0.0%	27%	22%	15%	0%	2%	1,104	1.48	40	18	22	12.2	9.8	2.4
Jamestown Shores	Future DeniteAll<1/4acre (1215 systems,547denite)	0.0%	27%	22%	15%	0%	2%	1,215	1.63	40	18	22	12.2	9.8	2.6
Jamestown Shores	Future Denite New only (1215 systems, 394 denite)	0.0%	27%	22%	15%	0%	2%	1,216	1.63	40	18	22	12.2	9.8	2.6

NOTE: All current, future and bmps all high impervic
 Runoff and nutrient loading estimates based on loca
 Nutrient loading estimates represent potential sourc
 Nutrient removal in surface or groundwater is not qu
 and undeveloped shore

JAMESTOWN ASSESSMENT - APPENDIX I - MANAGE summary results

STANDARD - NO BMPS

Study Area	Scenario	SW runoff % avail.	GW recharge % avail	Precip Mgal/yr	ET Mgal/yr	Avail. Precip Mgal/yr	surface runoff Mgal/yr	Avg.net recharge precip. Mgal/yr	ISDS recharge Mgal/yr	If 100% forested surface runoff Mgal/yr	Lost recharge from 100% forested Mgal/yr
Jamestown	Current Land Use	40%	60%	6719	3023	3695	1487.897567	2207.404502	67.372042	519.381102	968.516464
Jamestown Shores	Current Land Use	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Carr Pond Basin	Current Land Use	46%	54%	228	103	125	58.157845	67.184691	3.013637	42.724685	15.433160
Watson Pond Basin	Current Land Use	29%	71%	489	220	269	77.900497	191.165119	0.642013	35.120366	42.780131
Jamestown WHPA	Current Land Use (no water)	31%	69%	283	127	155	47.598188	107.785222	3.701083	19.832515	27.765673
Following future all standard high imperv											
Jamestown	Future Land Use	41%	59%	6717	3023	3695	1526.000709	2168.584519	116.579488	519.350889	1006.649820
Jamestown Shores	Future Land Use	55%	45%	808	364	444	245.637113	198.769475	53.438738	58.330716	187.306397
Carr Pond Basin	Future Land Use	48%	52%	228	103	125	60.577027	64.741616	3.386037	42.680676	17.896350
Watson Pond Basin	Future Land Use	27%	73%	489	220	269	73.975566	195.042267	1.558432	35.107878	38.867689
Jamestown WHPA	Future Land Use (with water)	46%	54%	312	140	171	78.523308	92.893052	4.199757	49.019628	29.503681
Alternative Assumptions and Man											
Jamestown Low Ag	Current Land Use	40%	60%	6719	3023	3695	1487.897567	2207.404502	67.372042	519.381102	968.516464
Carr Pond Basin Low Ag	Current Land Use	46%	54%	228	103	125	58.157845	67.184691	3.013637	42.724685	15.433160
Watson Pond Basin LowAg	Current Land Use	29%	71%	489	220	269	77.900497	191.165119	0.642013	35.120366	42.780131
Jamestown High Fert	Current Land Use	40%	60%	6717	3023	3695	1487.458784	2207.126461	67.319263	519.294215	968.164569
Jamestown High Fert	Future Land Use	41%	59%	6717	3023	3695	1526.000709	2168.584519	116.579488	519.350889	1006.649820
Jamestown Shores High Pets	Current Land Use	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown Shores High Fert	Current Land Use	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown Shores High Fert & HighPets	Current Land Use	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308

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Study Area	Scenario	SW runoff % avail.	GW recharge % avail	Precip Mgal/yr	ET Mgal/yr	Avail. Precip Mgal/yr	surface runoff Mgal/yr	Avg.net recharge precip. Mgal/yr	ISDS recharge Mgal/yr	If 100% forested surface runoff Mgal/yr	Lost recharge from 100% forested Mgal/yr
Jamestown Shores HighFert	Future Land Use	55%	45%	808	364	444	245.637113	198.769475	53.438738	58.330716	187.306397
Alternative Assumptions - low imperviou											
Jamestown	Current Land Use New Low Impervious	40%	60%	6717	3023	3695	1487.458784	2207.126461	67.319263	519.294215	968.164569
Jamestown Shores	Current Land Use New Low Impervious	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown	Future Land Use Low Imperv Final	41%	59%	6717	3023	3695	1,526	2,169	117	519	1,007
Jamestown Shores	Future Land Use low Imperv	55%	45%	808	364	444	245.637113	198.769475	53.438738	58.330716	187.306397
Jamestown WHPA	Future Land Use no water (corrected)	34%	66%	286	129	157	53.043497	104.358967	4.199757	23.539816	29.503681
Jamestown WHPA	Current Land UseNoWater	31%	69%	283	127	155	47.598188	107.785222	3.701083	19.832515	27.765673

REVISED PARCEL BMPS 01/15/03

							5.445309	-3.426254	0.498674	3.707301	1.738008
Jamestown Shores	Current Land Use (823 systems)	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown Shores	Current, Denite 1/4acre or less (823 systems, 270 denite)	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown Shores	Current, Denite Buffers (823 systems,91 denite)	50%	50%	807	363	444	220.446950	223.439939	36.197598	58.429642	162.017308
Jamestown Shores	Future Land Use, 100% Dev (1215 systems)	56%	44%	808	364	444	246.715377	197.691210	53.482720	60.127823	186.587554
Jamestown Shores	Future Land UseALLDenite 1215 systems	56%	44%	808	364	444	246.715377	197.691210	53.482720	60.127823	186.587554
Jamestown Shores	Future No Dev <1.5' (1217-113~1101 systems)	56%	44%	808	364	444	246.715377	197.691210	48.468715	60.127823	186.587554
Jamestown Shores	Future Denite all.No Dev <18" hwt (1101 systems, all denite)	56%	44%	808	364	444	246.715377	197.691210	48.468715	60.127823	186.587554
Jamestown Shores	Future DeniteNewHWT 1.5to3.5,No Dev <18"(1101 systems, 132 denite)	56%	44%	808	364	444	246.715377	197.691210	48.556680	60.127823	186.587554

JAMESTOWN ASSESSMENT - APPENDIX I - MANAGE summary results

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Study Area	Scenario	SW runoff % avail.	GW recharge % avail	Precip Mgal/yr	ET Mgal/yr	Avail. Precip Mgal/yr	surface runoff Mgal/yr	Avg.net recharge precip. Mgal/yr	ISDS recharge Mgal/yr	If 100% forested surface runoff Mgal/yr	Lost recharge from 100% forested Mgal/yr
Jamestown Shores	Future DeniteAll HWT 1.5to3.5,No Dev <18"(1103 systems, 413 denite)	56%	44%	808	364	444	246.715377	197.691210	48.556680	60.127823	186.587554
Jamestown Shores	Future DeniteAll<1/4acre (1215 systems,547denite)	56%	44%	808	364	444	246.715377	197.691210	53.438738	60.127823	186.587554
Jamestown Shores	Future Denite New only (1215 systems, 394 denite)	56%	44%	808	364	444	246.715377	197.691210	53.482720	60.127823	186.587554

NOTE: All current, future and bmps all high impervic
 Runoff and nutrient loading estimates based on loca
 Nutrient loading estimates represent potential sourc
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 and undeveloped shore

RIGIS Land Use	Updated 2003*	Original USDA 1975
HD Res. 1/8 acre	55	72
MHD Res. ¼ acre	36	50
MD Res 1 acre	14	30
MLD Res 2 acre	11	16
LD Res. < 2 acre	8	8
Commercial	72	72
Industrial	54	72
Roads	72	72
Airports	72	72
Railroads	72	72
Junkyards	72	72
Recreation	10	10
Institution	34	50

*Based on CWP 2002 adjusted to reflect RI parcel characteristics