WORKSHEET 1

CITY OF SPARTINA BEACH

DESCRIPTION:

210 single-family homes

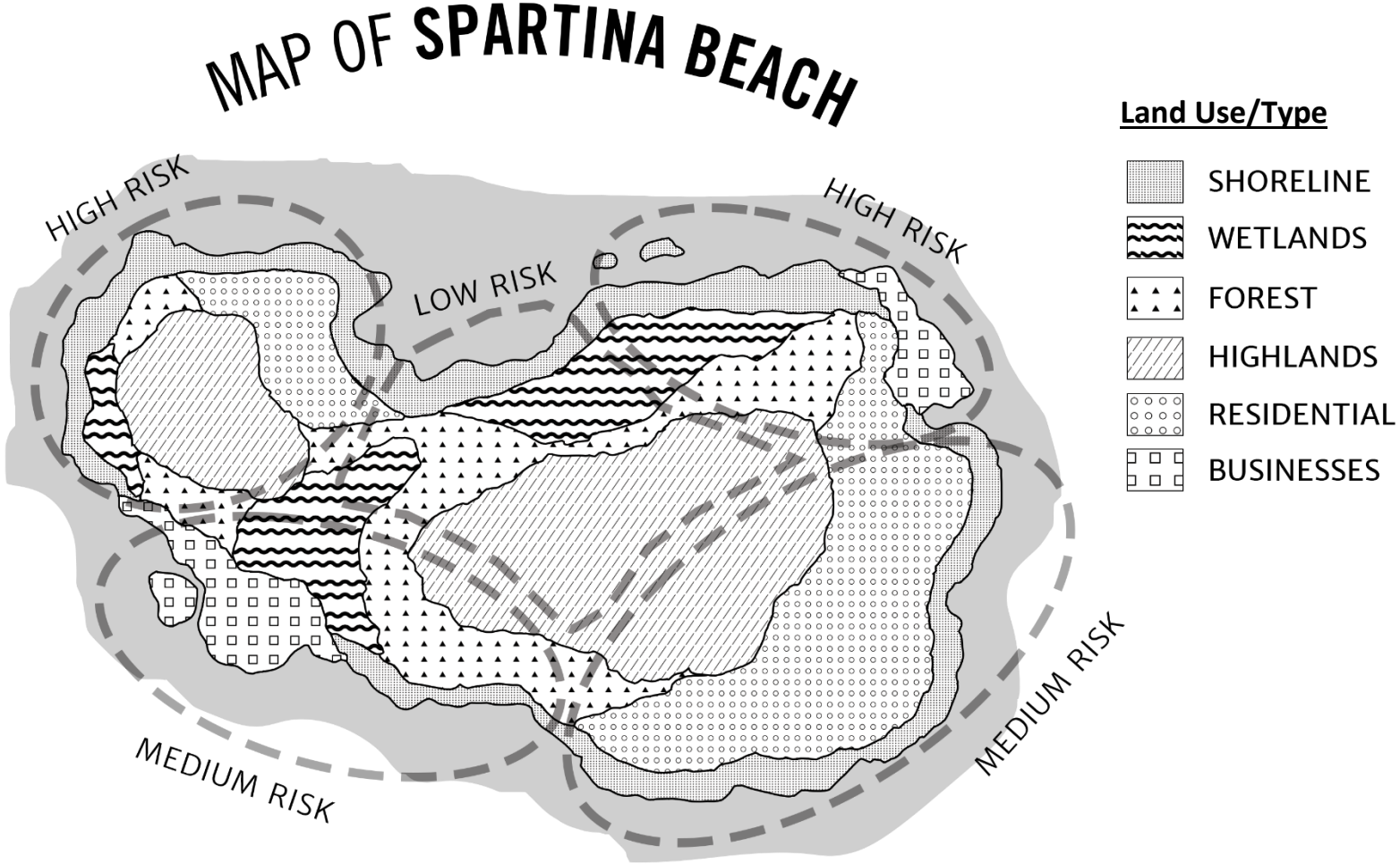
15% (53 homes) are prone to frequent flooding.

Several condominium and townhome complexes, and several hotels.

A 2-lane causeway connects the island to the mainland and is the only road in and out of town. This road floods at least 4 times per year.

The town has 25 miles of beach/marsh shoreline; 65% of the shoreline is developed with homes, businesses and parking lots.

The town has 4 schools: 2 elementary, 1 middle and 1 high school.



WORKSHEET 2

First selections (as a stakeholder group)

Fill in column A and calculate columns C and E:

- Column A – Units used *("Unit" refers to # of each solution used)*
- Column C – Calculate Total $ spent = (A x B)
- Column E – Calculate Environmental Quality = A x D

SOLUTION	A Units used	B Cost per unit	C Total $ spent = (A x B)	D Water Droplets per unit	E Environmental Quality = (A x D)
Relocate citizens away from risk		$50,000		5	
Sea wall or hardened shorelines		$40,000		1	
Living or soft shorelines		$20,000		5	
Elevated homes		$40,000		3	
Education and outreach campaigns		$10,000		3	
Update to "green" infrastructure		$30,000		4	
TOTAL					

Total $ spent: _____

Environmental Quality: _____

WORKSHEET 3

New selections (after class discussion)

Fill in column A and calculate columns C and E:

- Column A – Units used *("Unit" refers to # of each solution used)*
- Column C – Calculate Total $ spent = (A x B)
- Column E – Calculate Environmental Quality = A x D

SOLUTION	A Units used	B Cost per unit	C Total $ spent = (A x B)	D Water Droplets per unit	E Environmental Quality = (A x D)
Relocate citizens away from risk		$50,000		5	
Sea wall or hardened shorelines		$40,000		1	
Living or soft shorelines		$20,000		5	
Elevated homes		$40,000		3	
Education and outreach campaigns		$10,000		3	
Update to "green" infrastructure		$30,000		4	
TOTAL					

Total $ spent: _____

Environmental Quality: _____

WORKSHEET 4

Class selections (final agreed upon decisions)

Fill in column A and calculate columns C and E:

- Column A – Units used *("Unit" refers to # of each solution used)*
- Column C – Calculate Total $ spent = (A x B)
- Column E – Calculate Environmental Quality = A x D

SOLUTION	A Units used	B Cost per unit	C Total $ spent = (A x B)	D Water Droplets per unit	E Environmental Quality = (A x D)
Relocate citizens away from risk		$50,000		5	
Sea wall or hardened shorelines		$40,000		1	
Living or soft shorelines		$20,000		5	
Elevated homes		$40,000		3	
Education and outreach campaigns		$10,000		3	
Update to "green" infrastructure		$30,000		4	
TOTAL					

Total $ spent: _____

Environmental Quality: _____