

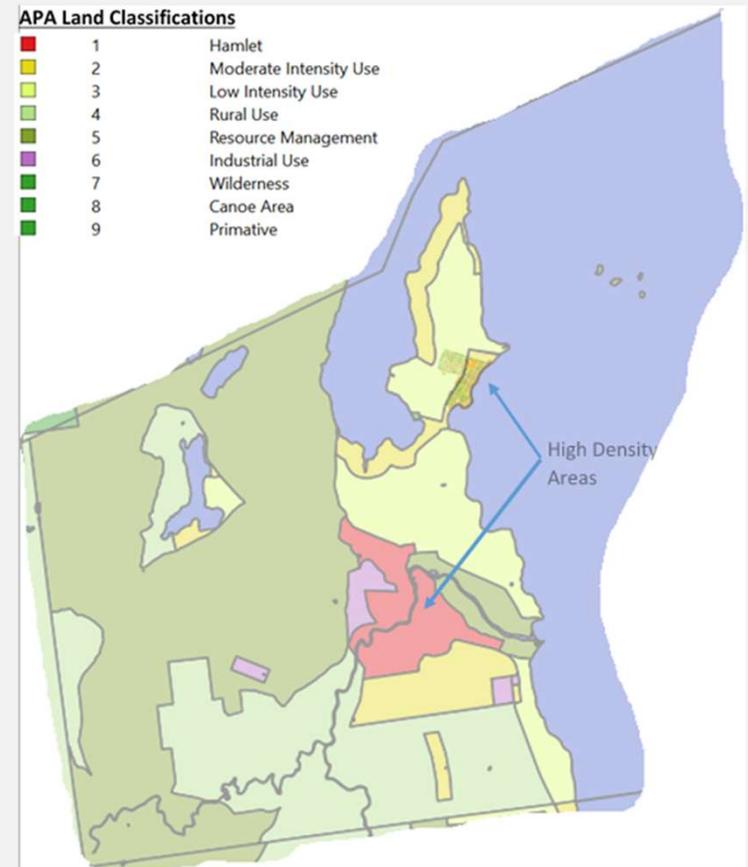


TOWN OF WILLSBORO  
BUENA VISTA WATER QUALITY  
IMPROVEMENT PROJECT

# BUENA VISTA: DEVELOPMENT AND CONSEQUENCE

## Willsboro population density: (2) sections

- Hamlet of Willsboro: Storm Water Infrastructure, Sanitary Sewer Infrastructure and Public Water Infrastructure. (Plan and purpose)
- Willsboro Point: Natural Drainage Ditches susceptible to interferences, No sanitary sewer, Public Water. (Limited Plan with outgrown purpose)



# BUENA VISTA: PLANNING AREA

## Willsboro Point: Planning Area

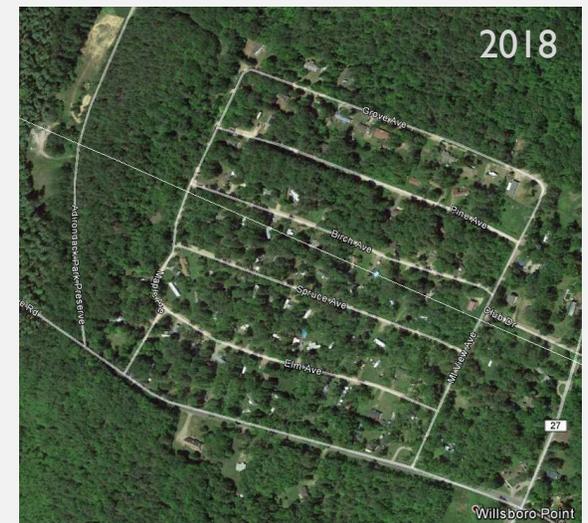
- Planning Area 1: Densely populated upland trailer park.
- Planning Area 2: Densely populated down gradient lake front properties.

## Planning Area: Objectives

- NYS EFC Engineering Planning Grant (EPG) objective to assess wastewater treatment concerns in the planning area.
- Other planning concerns involve drainage and erosion from Town and area residences.



# BUENA VISTA: BACKGROUND

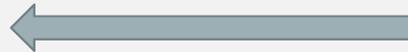


# BUENA VISTA: STORM DRAINAGE

Currently mapped NYS DEC wetlands and APA wetlands enforceable by State and Local Codes.



Unprotected Drainage areas, although mentioned in subdivision documents are unenforced or unsupported.



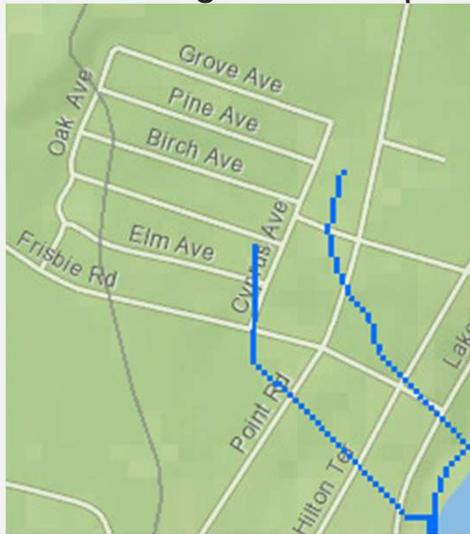
Consideration of mapped areas to be submitted to the Adirondack Park Agency for assistance in protecting natural resources and property.



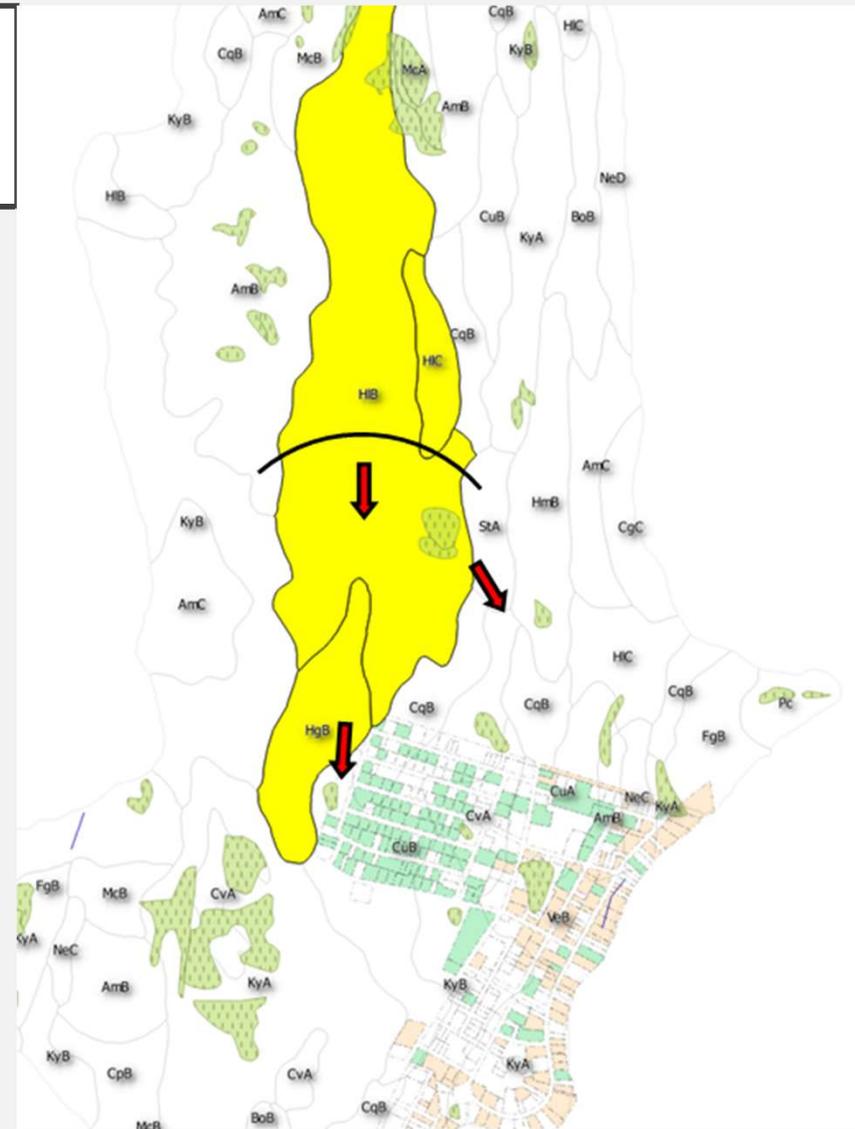


# BUENA VISTA: COMBINATION OF SURFACE AND UNDERGROUND CONDITIONS

- Underground storage of water
- Surface drainage excavated into underground storage
- Sand and gravel conduits to points of discharge
- Resulting down gradient conditions of excessively wet poor draining areas susceptible to septic system failure.



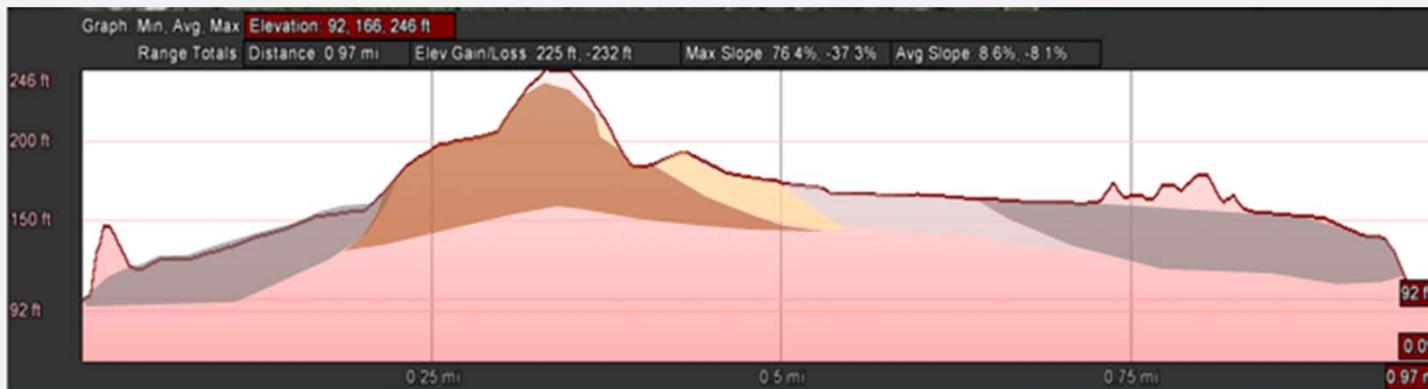
- NYS DEC Mapped intermittent stream locations have been altered.
- Property damage and unusable parcels.
- Complaints persist, Solutions resisted.



## BUENA VISTA: DRAINAGE PROFILE

Problem in profile: Excavation of ditching, increase in hydraulic and environmental impact, inducing ground water flow into poorly draining soils resulting prolonged saturation with high runoff potential.

- Continued ditching (not a solution, exacerbates the problem)
- Detention ponds (not a solution, additional maintenance, anticipated to be filled with groundwater)
- Limited property for access (no solution for construction within the Town/County reach for drainage concerns).



# BUENA VISTA: SEWAGE TREATMENT SOLUTIONS



## Treatment Alternatives:

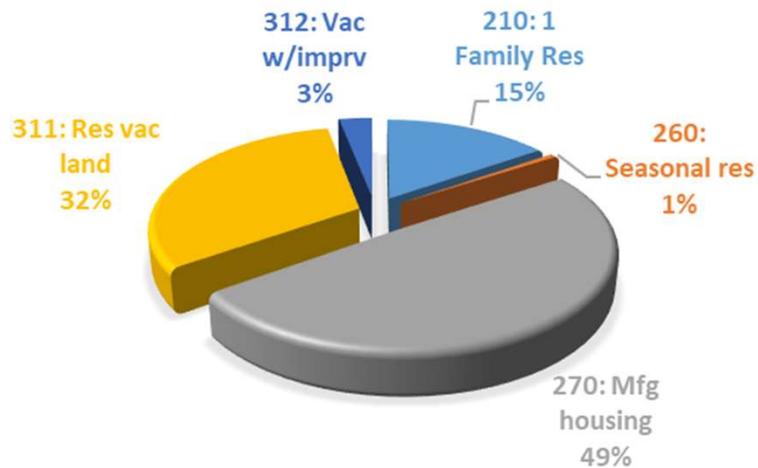
- Limited areas of onsite treatment system failure or high potential of failure. (Alternative 1)
- Extended area of treatment for potential failure, expandable to Planning Area 1. (Alternative 2)
- Entire high density zoning, Planning Area 1 and 2. (Alternative 3)
- No action. (Alternative 4)

# BUENA VISTA: SEWAGE TREATMENT SOLUTIONS – COST CONSEQUENCE

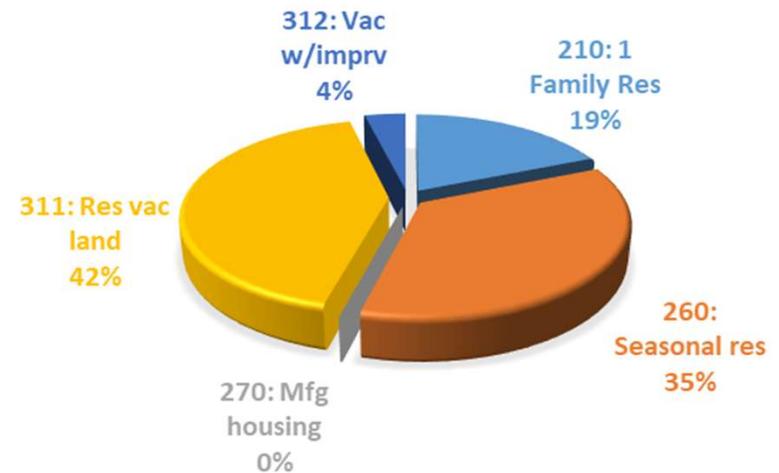
Table 4.1				
	Septic System Management (Alternative #1)	Decentralized Sewage Treatment (Alternative #2)	Central Sewer Collection and Treatment (Alternative #3)	No Action (Alternative #4)
<b>Capital Costs</b>	\$ 1,954,340	\$ 3,221,880	\$ 13,660,183	(Not Determined to Date)
<b>Interest (assuming 3.2%)</b>	\$ 1,088,334	\$ 1,794,203	\$ 7,607,092	
<b>Operations Costs (30 years)</b>	\$ 141,900	\$ 1,042,931	\$ 4,351,335	
<b>Maintenance Costs (30 Years)</b>	\$ 45,150.00	\$ 49,950.00	\$ 104,140.00	
<b>Short Lived Assets (&lt;20 years)</b>	\$ 51,600.00	\$ 64,400.00	\$ 217,860.00	
<b>Number of EDUs (Current)</b>	43	43	234	
<b>Estimated User Rate (based on 30 yr payment)</b>	\$ 2,543.66	\$ 4,785.55	\$ 3,695.24	(Not Determined to Date)
<b>Non-Monetary Factors</b>				
<b>Water Quality Objectives</b>	Moderately met for most critical area until undocumented failures are discovered	Moderately met for most critical area until undocumented failures are discovered	Water quality objectives met	Water quality objectives not achieved
<b>Surface Water Runoff Objectives</b>	No anticipated improvement	Some improvement	Some improvement	No anticipated improvement
<b>Property Valuation</b>	Isolated improvement in project area	Isolated improvement in project area with potential improvements in the planning	Significant improvement in the entire planning area with public sewer available	No change anticipated
<b>Future Needs Assessment</b>	Very limited	Moderately limited	Future needs goals achieved	needs
<b>Property Issues</b>	No additional property required	Treatment site and collection system easements	Treatment site and collection system easements as well as outfall and intermittent stream	Disputes between neighbors
<b>Permitting</b>	Minor Permitting	Moderate Permitting	Major Permitting	Minor Existing Permitting
<b>District Formation</b>	District problems not anticipated in locations of failure	District problems not anticipated in locations of failure	Less chance of district formation anticipated with greater % seasonal population	No district necessary
<b>Achieving Regulatory Compliance</b>	NA	NA	NA	NA

# BUENA VISTA: SEWAGE TREATMENT SOLUTIONS – FUNDING ISSUES

## PROJECT PLANNING AREA 1 - REAL PROPERTY BREAKDOWN



## PROJECT PLANNING AREA 2 - REAL PROPERTY BREAKDOWN



# BUENA VISTA: DIRECTION

## **Planning items for consideration:**

- Involve Adirondack Park Agency in enforcement of drainage concerns.
- Land takings for protection of natural resources and protection of developed private property.
- Land development restrictions to halt further negative impacts.
- Sewer district formation, initiated by public or Town Board.
- No Action Alternative.
- Required Action, current regulations

## **Consequence**

- Increased Regulation
- Increased Regulation
- Increased Regulation
- Increase in Taxes
- Assumed Property Owner responsibility
- Personal responsibility for outstanding violations.