6 Problems & Causes

The stakeholder concerns which the steering committee has chosen to focus on have been carried forward into Table 87 which relates concerns to problems in the watershed. Problems are conditions or actions that need to be changed, improved or investigated further.

| Concern | | Problem |
|---------|--|--|
| • | Need for Conserved Open Spaces, Riparian Corridor Acquisition, Recreational Access Stream Habitat Loss and Riparian Encroachment Wetland Habitat Loss and Degradation Ability of Watershed to Store and Filter Storm Water Runoff While Providing Habitat Habitat Restoration and Long-Term Management of Natural Areas | The degradation and loss of upland and riparian habitats is negatively affecting our watershed's ability to store and filter storm water runoff while also providing important habitat and recreation opportunities. |
| • | Negative Impact of Impaired Waterways to Recreational Use, Property Values, and Economic Development | Some of our streams are frequently turbid and have nuisance levels of aquatic plant growth and algal blooms. |
| • | Negative Impact of Impaired Waterways to Recreational Use, Property Values, and Economic Development Failing Septic Systems Combined Sewer and Sanitary Sewer Overflows | Elevated pathogens levels pose a health risk to full body contact recreational use of our streams. |
| • | Negative Impact of Impaired Waterways to Recreational Use, Property Values, and Economic Development | Poor quality fish community structure and numbers limit recreational use of our streams and lakes. |
| • | Coordination Between Municipalities, Business, and Residents Enforcement of Existing Regulations Protective of Stream Health Maintenance of Existing Plans Public Involvement Litter Left Behind After Floodwaters Recede Some Absentee Agricultural Landowners Seem to be Land Speculators with Less Interest in Investing in BMPs to Protect Water Quality Soil Health | Awareness of watershed issues and collaboration need to be increased to protect our streams, lakes and natural areas. |
| • | Reconciling Need for Drainage While Also Protecting Water Quality and Aquatic Life Negative Impacts Associated with Dams | Hydromodification is negatively affecting aquatic life and recreational use of our streams and lakes. |
| • | Excessive Sediment and Nutrient Loading from Urban and Agricultural Land Uses Sedimentation of Lake George and Burns Ditch | Excessive sediment and nutrient loading threaten aquatic life and recreational use of our streams and lakes. |

| Concern | Problem |
|--|--|
| Increased Storm Water Runoff Volume Causing Streambank and Shoreline | Losses of upland, riparian and wetland habitats, and |
| Erosion | increases in impervious surface cover exacerbate |
| Flooding, Floodplain Encroachment, and Stream Flashiness | streambank erosion and downstream flooding. |

Table 87 Problems reflecting stakeholder concerns

Table 88 relates problems to potential causes. A cause is considered an event or actions that produce an effect which in this case is the problem statement.

| Problem | Potential Cause(s) |
|--|---|
| The degradation and loss of upland and riparian habitats is negatively affecting our watershed's ability to store and filter storm water runoff while also providing important habitat and recreation opportunities. | Encroachment on and conversion of upland, riparian and wetland habitat for development and agricultural land uses. |
| Some of our streams and lakes are frequently turbid and have nuisance levels of aquatic plant growth and algal blooms. | Nutrient concentrations often exceed the protective water quality target values established by this watershed restoration plan. Sediment concentrations often exceed the protective water quality target values established by this watershed restoration plan. |
| Elevated pathogens levels pose a health risk to full body contact recreational use of our streams. | <i>E. coli</i> concentrations often exceed state water quality standards. |
| Poor quality fish community structure and numbers limit recreational use of our streams and lakes. | Streams lack the habitat quality that is conducive to supporting a healthy warm water fishery as indicated by QHEI scores. Dissolved oxygen concentrations fall below state water quality standards. Nutrient concentrations often exceed the protective water quality target values established by this watershed restoration plan. Ammonia concentrations often exceed the protective water quality target values established by this watershed restoration plan. Sediment concentrations often exceed the protective water quality target values established by this watershed restoration plan. |
| Awareness of watershed issues and collaboration need to be increased to protect our streams, lakes and natural areas. | Limited resources and/or awareness of need. Communities/organizations have other issues that are a higher priority than water quality and aquatic habitats |
| Hydromodification activities are negatively affecting aquatic life and recreational use of our streams and lakes. | Hydromodification activities disrupts hydraulic, geomorphic, physiochemical, and biotic stream functions. |
| Excessive sediment and nutrient loading threaten aquatic life and recreational use of our streams and lakes. | Nutrient concentrations often exceed the protective water quality target values established by this watershed restoration plan. |

| Problem | Potential Cause(s) |
|---|---|
| | Sediment concentrations often exceed the protective water quality target values established by this watershed restoration plan. Channelized streams disassociated the stream from their floodplain. |
| Losses of upland, riparian and wetland habitats, and increases in impervious surface cover exacerbate streambank erosion and downstream flooding. | Conversion of forest, grassland and wetland habitats for human land uses such as development and agriculture. Development siting and implementation of post-development practices not sufficiently protective of environmental features and ecosystem functions. |

Table 88 Potential causes for identified problems