

## Resource Concerns and Conservation Planning Criteria

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Resource Concern - Cause	Description of Concern	Land Use	Resource Concern Component	Planning Criteria		Measurement & Assessment Tools
<p>A resource concern (RC) is an expected degradation of the soil, water, air, plant, or animal resource base to an extent that the sustainability or intended use of the resource is impaired. Because NRCS quantifies or describes resource concerns as part of a comprehensive conservation planning process that includes client objectives, human and energy resources are considered components of the resource base. The "Cause" is the specific reason or threat to the resource that results in the resource concern.</p>		<p>* Required Assessment</p> <p>Range Is Listed Nationally As A Specific Land Use, But Is Not Applicable to VT</p>	<p>For planning purposes, some resource concerns are divided into components where there is a clear distinction in the causal factors, the mitigating actions, and the anticipated environmental effect.</p> <p>** = Not a Resource Concern In Vermont</p>	<p>A planning criterion is a quantitative or qualitative method to assess the existing condition of the natural resources on a site to determine whether additional treatment is needed to address a specific potential resource concern. <b>Planning Consideration</b> - A planning consideration is a description of potential actions or activities that should be considered to help address an identified resource concern and/or to address unintended consequences of an action. Planning considerations are identified for resource concerns when it is not appropriate or technologically feasible to identify specific criteria or a threshold for treatment.</p>		<p>Description of the technology or process for determining if assessment criteria are met.</p> <p><b>R</b> = Required Assessment Tool</p> <p><b>Note: 'Planner Field Assessment' includes written documentation of findings. Use Customer Interview forms section 'Documentation: Visual Assessment Of Resource Concerns'. Customer assistance notes must also always be used to document field visits.</b></p>
				<p><b>Screening Level</b></p> <p>Screening level criteria are defined, when appropriate, to identify sites with conditions that have little or no probability of needing additional treatment to address the specific resource concern. If the site meets the screening level criteria, then no other assessment is needed to document that planning criteria are met on this site. States can delete or edit nationally identified screening criteria to address localized conditions.</p>	<p><b>Basic Assessment Level</b></p> <p>Basic assessment level criteria are used when a site does not meet screening level criteria, or when no screening level criteria are defined. Assessment levels are also used when formulating and evaluating alternatives. National criteria establish the minimum for all sites. States may add state-specific criteria to address local conditions.</p>	

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SOIL	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>SOIL EROSION - Sheet, rill, &amp; wind erosion</b>	Detachment and transportation of soil particles caused by rainfall runoff/splash, irrigation runoff or wind that degrades soil quality.	<ul style="list-style-type: none"> <li>• Crop*</li> <li>• Developed Land*</li> <li>• Farmsteads*</li> <li>• Associated Ag Land*</li> <li>• Designated Protected Area*</li> <li>• Other Rural Land*</li> <li>• Pasture*</li> </ul>	Sheet & Rill	Permanent ground cover > 90% and slope < 10%	Water erosion rate ≤ T	<b>R - RUSLE2</b>  Line Transect Residue Measurement (VT Agronomy Technical Note 1)
			Wind **		Wind erosion rate ≤ T	
		<ul style="list-style-type: none"> <li>• Forest*</li> </ul>	Sheet & Rill Wind **	Soil surface organic residue cover > 80%	Site is stable and without visible signs of erosion	<b>R - Planner Field Assessment</b>
<b>SOIL EROSION – Concentrated flow erosion</b>	Untreated classic gullies may enlarge progressively by head cutting and/or lateral widening. Ephemeral gullies occur in the same flow area and are obscured by tillage. This includes concentrated flow erosion caused by runoff from rainfall, snowmelt or irrigation water.	<ul style="list-style-type: none"> <li>• Crop*</li> </ul>	Ephemeral gullies	Ephemeral gullies are not occurring	Conservation practices and managements are in place to prevent or control ephemeral gullies	<b>R - Planner Field Observations / Assessment and measurements where gullies exist, documented using 'VT EGS Erosion Estimator'</b>  Note: This tool will also be used when ephemeral gullies are identified during Food Security Act HEL Compliance planning.
			Classic gullies	Classic gullies are not present	Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures	
		<ul style="list-style-type: none"> <li>• Forest*</li> <li>• Farmsteads*</li> <li>• Pasture*</li> <li>• Developed Land*</li> <li>• Associated Ag Land*</li> <li>• Designated Protected Area*</li> <li>• Other Rural Land*</li> </ul>	Classic gullies	Classic gullies are not present	Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures	
<b>SOIL EROSION– Excessive bank erosion from streams shorelines or water conveyance channels</b>	Sediment from banks or shorelines threatens to degrade water quality and limit use for intended purposes.	<ul style="list-style-type: none"> <li>• Crop*</li> <li>• Forest</li> <li>• Developed Land*</li> <li>• Associated Ag Land*</li> <li>• Designated Protected Area*</li> <li>• Water*</li> <li>• Other Rural Land*</li> <li>• Farmsteads*</li> <li>• Pasture*</li> </ul>		Bank erosion commensurate with normal geomorphic processes; or land mgt. not contributing to erosion; and not an objective of the landowner.	For streambanks; 'VT Visual Assessment of Streambank Stability' score of 7 or higher in each category.	<b>R - 'VT Visual Assessment of Streambank Stability Worksheet'</b>  SVAP2
<b>SOIL QUALITY DEGRADATION - Subsidence **</b>	Loss of volume and depth of organic soils due to oxidation caused by above normal microbial activity resulting from excessive water drainage, soil disturbance, or extended drought. This excludes karst / sinkholes issues or depressions caused by underground activities.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Forest</li> <li>• Associated Ag Land</li> <li>• Designated Protected Area</li> <li>• Pasture</li> </ul>		Histisol soils are not present  <b>OR</b>  Histisols soils are not exhibiting subsidence	Subsidence is adequately managed to meet client's objectives  Note: This resource concern is generally not applicable to Vermont.	<b>R - Planner Field Assessment</b>  Client input
<b>SOIL QUALITY DEGRADATION – Compaction</b>	Management induced soil compaction resulting in decreased rooting depth that reduces plant growth, animal habitat and soil biological activity.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Forest</li> <li>• Associated Ag Land</li> <li>• Designated Protected Area</li> <li>• Other Rural Land</li> <li>• Pasture</li> </ul>		Soil compaction is not a documented problem  Note: Activities such as tillage or use of heavy equipment often cause soil compaction	Compaction is managed to meet Client's production and management objectives  Note: Clients may not always be aware that compaction is causing problems. If unclear it is recommended to check a few representative fields with proper assessment tool.	<b>R - Planner Observation /Assessment of soil and/or plant condition</b>  <b>R - Client Interview</b>  Soil Probe, Penetrometer or Shovel

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<b>SOIL QUALITY DEGRADATION – Organic matter depletion</b>	Soil organic matter is not adequate to provide a suitable medium for plant growth, animal habitat, and soil biological activity.	• Crop* • Pasture		Permanent ground cover > 80%	SCI > 0	<b>R</b> - RUSLE2
		• Forest		Soil organic matter depletion is not a problem <b>AND</b> Activities do not cause soil organic matter depletion	Soil organic matter is managed to meet Client objectives	<b>R</b> - Planner Observation/Assessment of soil and/or plant condition <b>R</b> - Client Interview
<b>SOIL QUALITY DEGRADATION – Concentration of salts or other chemicals</b>	Concentration of salts leading to salinity and/or sodicity reducing productivity or limiting desired use, or concentrations of other chemicals impacting productivity or limiting desired use.	• Crop • Pasture • Associated Ag Land • Farmsteads	VT - Includes: Dairy operations use and/or disposal methods of Copper Sulfate for livestock hoof treatment	Activities do not cause salinity/sodicity or other chemical concentration concerns	Conservation practices and managements are in place to mitigate on-site effects	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview Soil diagnostic evaluations (soil tests)
WATER	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>EXCESS WATER – Ponding, flooding, seasonal high water table, seeps, and drifted snow</b>	Surface water or poor subsurface drainage restricts land use and management goals. Wind-blown snow accumulates around and over surface structures, restricting access to humans and animals.	• Crop • Forest • Farmsteads • Pasture • Developed Land • Associated Ag Land • Designated Protected Area • Other Rural Land	Ponding and Flooding	Ponding or flooding not a problem <b>AND</b> Activities do not cause ponding/flooding problems	Excess water is managed to meet Client's objectives within regulatory authority	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview
			Seasonal High Water Table	Seasonal high water table does not cause a problem		
			Seeps	Excess water from seeps does not cause a problem		
<b>INSUFFICIENT WATER – Inefficient moisture management</b>	Natural precipitation is not optimally managed to support desired land use goals or ecological processes.  Note: This is focused on the capture and retention of moisture for crop production.	• Crop • Developed Land • Forest • Associated Ag Land • Designated Protected Area • Pasture		Moisture management is not a problem <b>AND</b> Activities do not cause inefficient moisture management problems	Runoff and evapotranspiration levels are minimized to meet Client's management objectives	<b>R</b> -Planner Field Assessment <b>R</b> - Client Interview
<b>INSUFFICIENT WATER – Inefficient use of irrigation water</b>	Irrigation water is not stored, delivered, scheduled and/or applied efficiently. Aquifer or surface water withdrawals threaten sustained availability of ground or surface water. Available irrigation water supplies have been reduced due to aquifer depletion, competition, regulation and/or drought.	• All*		PLU is not irrigated	Meets clients goal for water use efficiency <b>AND</b> There are no documented problems with water withdrawal from surface waters or aquifers	<b>R</b> -Planner Field Assessment <b>R</b> - Client Interview

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<b>WATER QUALITY DEGRADATION: Excess nutrients in surface and ground waters</b>	Nutrients - organic and inorganic - are transported to receiving waters through surface runoff and/or leaching into shallow ground waters in quantities that degrade water quality and limit use for intended purposes.	<ul style="list-style-type: none"> <li>• Crop*</li> <li>• Pasture*</li> </ul>	Excess nutrients in surface water	Organic or inorganic nutrients are not applied	Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields, <b>AND</b> Conservation practices and managements are in place to minimize surface water impacts	R -Planner Field Assessment  R - Client Interview
			Excess nutrients in groundwater	<b>AND</b> PLU is not grazed	Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields <b>AND</b> Conservation practices and managements are in place to minimize groundwater impacts	Nutrient budget/NPM
		<ul style="list-style-type: none"> <li>• Developed Land</li> </ul>	Excess nutrients in surface water	Organic or inorganic nutrients are not applied	Nutrients if applied, are based on a soil test, tissue tests or nutrient budget <b>AND</b> Conservation practices and managements are in place to minimize surface water impacts	R - Planner Field Assessment
			Excess nutrients in groundwater		Nutrients if applied, are based on a soil test, tissue tests or nutrient budget <b>AND</b> Conservation practices and managements are in place to minimize groundwater impacts	R - Client Interview  Nutrient budget/NMP
<b>WATER QUALITY DEGRADATION: Excess nutrients in surface and ground waters (continued)</b>	Nutrients - organic and inorganic - are transported to receiving waters through surface runoff and/or leaching into shallow ground waters in quantities that degrade water quality and limit use for intended purposes.	<ul style="list-style-type: none"> <li>• Other Rural Land</li> <li>• Associated Ag Land</li> <li>• Designated Protected Area</li> <li>• Water</li> <li>• Forest</li> </ul>	Excess nutrients in surface water	Organic or inorganic nutrients are not applied <b>AND</b> PLU is not grazed	Nutrients if applied, are based on a soil test, tissue tests or nutrient budget <b>AND</b> Conservation practices and managements are in place to minimize surface water impacts	R - Planner Field Assessment  R - Client Interview
			Excess nutrients in groundwater	There are no confined livestock areas	Nutrients if applied, are based on a soil test, tissue tests or nutrient budget <b>AND</b> Conservation practices and managements are in place to minimize groundwater impacts	Nutrient budget/NMP
		<ul style="list-style-type: none"> <li>• Farmsteads*</li> </ul>	Excess nutrients in surface water	Organic or inorganic nutrients are not applied or present <b>AND</b> PLU is not grazed	Conservation practices and managements are in place to minimize surface water impacts <b>AND</b> Surface waters are protected from contamination due to runoff and leaching from storage sites, spill and other concentrated sources	R - Planner Field Assessment  R - Client Interview
			Excess nutrients in groundwater	There are no confined livestock areas	Conservation practices and managements are in place to minimize groundwater impacts <b>AND</b> Groundwater is protected from contamination due to runoff and leaching from storage sites, spill and other concentrated sources	R- VT7 Manure Storage Assessment  Nutrient budget

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<b>WATER QUALITY DEGRADATION – Pesticides transported to surface and ground waters</b>	Pest control chemicals are transported to receiving waters in quantities that degrade water quality and limit use for intended purposes.	• All	Pesticides transported to surface water	Pesticides are not stored on-farm and are not applied by the client	Pesticides are stored, handled, disposed and managed to prevent runoff, spills, leaks and leaching <b>AND</b> Conservation practices and managements are in place to minimize surface or groundwater impacts	R - Client Interview R - WinPST R- VT2 Pesticide Storage and Handling Assessment Planner Field Assessment
			Pesticides transported to groundwater			
<b>WATER QUALITY DEGRADATION – Excess pathogens and chemicals from manure, bio-solids or compost applications</b>	Pathogens, pharmaceuticals, and other chemicals carried by land applied soil amendments are transported to receiving waters in quantities that degrade water quality and limit use for intended purposes. This resource concern also includes the off-site transport of leachate and runoff from compost or other organic materials of animal origin.	• Crop* • Farmsteads* • Forest • Developed Land • Associated Ag Land • Other Rural Land • Designated Protected Area • Water • Pasture*	Pathogens and chemicals from manure, bio-solids, or compost applications transported to surface water	Potential sources of pathogens or pharmaceuticals are not applied on the land	Organic materials are applied, stored, and/or handled to mitigate negative impacts to surface water sources	R - Planner Field Assessment
			Pathogens and chemicals from manure, bio-solids, or compost applications transported to groundwater	Potential sources of pathogens or pharmaceuticals are not applied on the land <b>AND</b> Animal mortalities are not handled on-farm <b>OR</b> Facilities are constructed and maintained to 316 standard	Organic materials are applied, stored, and/or handled to mitigate negative impacts to groundwater sources <b>AND</b> Animal Mortality Worksheet Score of 2.5 or greater	R - Client Interview R-Animal Mortality Handling Assessment
<b>WATER QUALITY DEGRADATION – Excessive salts in surface and ground waters **</b>	Irrigation or rainfall runoff transports salts to receiving water in quantities that degrade water quality and limit use for intended purposes.	• All	Excessive salts in surface water	Excess salt is not a problem <b>AND</b> Activities do not contribute to excess salt problem	Salt concentrations are managed to mitigate off-site transport to surface waters	N/A **
			Excessive salts in groundwater		Salt concentrations are managed to mitigate off-site transport to groundwater	
<b>WATER QUALITY DEGRADATION – Petroleum, heavy metals and other pollutants transported to receiving waters</b>	Heavy metals, petroleum and other pollutants are transported to receiving water sources in quantities that degrade water quality and limit use for intended purposes.	• All	Petroleum, heavy metals, and other pollutants transported to surface water	Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants	Petroleum, heavy metals or other potential pollutants are stored and handled to avoid runoff to surface water	R -Planner Field Assessment R - Client Interview
			Petroleum, heavy metals, and other pollutants transported to groundwater	Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants	Petroleum, heavy metals or other potential pollutants are stored and handled to avoid leaching to groundwater	R - Vermont NRCS worksheet 'VT4-PetroleumProductStorage'

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<b>WATER QUALITY DEGRADATION – Excessive sediment in surface waters</b>	Off-site transport of sediment from sheet, rill, gully, and wind erosion into surface water that threatens to degrade surface water quality and limit use for intended purposes.	<ul style="list-style-type: none"> <li>• Crop*</li> <li>• Developed Land*</li> <li>• Farmsteads*</li> <li>• Other Rural Land</li> <li>• Associated Ag Land</li> <li>• Designated Protected Area</li> <li>• Water</li> <li>• Pasture*</li> </ul>		Permanent ground cover > 90% and slope < 10% <b>OR</b> Ephemeral gullies do not occur and classic gullies are not present <b>OR</b> Tilled crop fields < or = to 3% slope <b>OR</b> Tilled crop fields >3 slope without a direct hydrologic connection to surface waters	Upslope treatment and buffer practices address concentrated flows to water bodies <b>AND</b> Livestock and vehicle water crossings are stable <b>AND</b> Water erosion rate ≤ T <b>AND</b> For tilled cropland, Sediment Indicators Worksheet results in score of 'Good' or better	<b>R</b> - RUSLE2  <b>R</b> - Planner Field Assessment  <b>R</b> - Client Interview  <b>R</b> - VT NRCS Worksheet: Sediment Indicators For Cropland
		<ul style="list-style-type: none"> <li>• Forest*</li> </ul>		There are no untreated sources of erosion <b>AND</b> Streams or shoreline are not on or adjacent to site <b>AND</b> Stream erosion is natural geomorphic process	Upslope treatment and buffer practices address concentrated flows to water bodies <b>AND</b> Heavy use areas are stable <b>AND</b> For streambanks; 'VT Visual Assessment of Streambank Stability' score of 7 or higher in each category.	<b>R</b> - Client input / planner observation <b>R</b> - 'VT Visual Assessment of Streambank Stability Worksheet'
<b>WATER QUALITY DEGRADATION – Elevated water temperature</b>	Surface water temperatures exceed State/Federal standards and/or limit use for intended purposes.	<ul style="list-style-type: none"> <li>• All</li> </ul>		Water courses on or adjacent to the site are not designated by VTDEC as temperature impaired	Existing conservation practices are in place to address water temperature <b>AND</b> VT_Stream Temperature Assessment results in a score of 7 or greater <b>OR</b> [SVAP2 - riparian area quality element score ≥ 5 <b>AND</b> SVAP2 - riparian area quantity quality element score ≥ 5 <b>AND</b> SVAP2 - canopy cover element score ≥ 6	<b>R</b> - Planner Field Assessment  <b>R</b> - Client Interview  <b>R</b> - VT_Stream Temperature Assessment  303(d) List of Impaired Streams  SVAP2  VT ANR Atlas

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PLANT	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>DEGRADED PLANT CONDITION – Undesirable plant productivity and health</b>	Plant productivity, vigor and/or quality negatively impacts other resources or does not meet yield potential due to improper fertility, management or plants not adapted to site. This includes addressing pollinators and beneficial insects.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Farmsteads</li> <li>• Developed Land</li> <li>• Designated Protected Area</li> <li>• Associated Ag Land</li> <li>• Other Rural Land</li> </ul>		Plant production and health is not a client concern	Plants are adapted to the site, meet production goals and do not negatively impact other resources <b>AND</b> Plant damage from wind erosion is below Crop Damage Tolerance levels	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview Crop Tolerance Table
		<ul style="list-style-type: none"> <li>• Pasture*</li> </ul>		No pasture <b>OR</b> Plant production and plant health/productivity is not a client concern	VT PCS - results in a ranking of 'Good or Very Good'  Plants are adapted to the site, meet production goals and do not negatively impact other resources	<b>R</b> - Vermont NRCS Pasture Condition Score Sheet (PCS) (if plant production is a client concern) <b>R</b> - Planner Field Assessment
		<ul style="list-style-type: none"> <li>• Forest</li> </ul>		Plant production and health is not a client concern	Forest species are adapted to site <b>AND</b> Composition and stand density meets the Client's objectives and production goals	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview Forest Management Plan Stand Descriptions Silvicultural/Stocking Guides
<b>DEGRADED PLANT CONDITION – Inadequate structure and composition</b>	Plant communities have insufficient composition and structure to achieve ecological functions and management objectives. This includes degradation of wetland habitat, targeted ecosystems, or unique plant communities.	<ul style="list-style-type: none"> <li>• Forest</li> <li>• Designated Protected Area</li> <li>• Associated Ag Land</li> <li>• Water</li> <li>• Pasture</li> </ul>		Plant communities support the intended land use and desired ecological functions	Plant communities contain adequate diversity, composition and structure to support desired ecological functions	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview Natural Plant Communities Guide(s) 'Wetland, Woodlands, Wildlife' Forest Management Plan Stand Descriptions
<b>DEGRADED PLANT CONDITION – Excessive plant pest pressure</b>	Excessive pest damage to plants including that from undesired plants, diseases, animals, soil borne pathogens, and nematodes. This concern addresses invasive plant, animal and insect species.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Forest*</li> <li>• Farmsteads</li> <li>• Developed Land</li> <li>• Associated Ag Land</li> <li>• Designated Protected Area</li> <li>• Water</li> <li>• Other Rural Land</li> <li>• Pasture*</li> </ul>		Plant productivity is not limited from pest pressure	Pest damage to plants are below economic or environmental thresholds or client-identified criteria <b>AND</b> Plant pests, including noxious and invasive species are managed to meet client objectives	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview Forest Management Plan

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<b>DEGRADED PLANT CONDITION– Wildfire hazard, excessive biomass accumulation **</b>	The kinds and amounts of fuel loadings - plant biomass - create wildfire hazards that pose risks to human safety, structures, plants, animals, and air resources.	• All		Wildfire hazard is not a concern	Fuel loads and fuel ladders are managed to provide defensible space and meet client objectives	N/A **
ANIMAL	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>INADEQUATE HABITAT FOR FISH AND WILDLIFE – Habitat degradation</b>	Quantity and quality of food is inadequate to meet requirements of identified fish, wildlife or invertebrate species.	All with “wildlife” modifier - (Required when Land Use has a wildlife modifier)	Quantity, quality of food is inadequate to meet requirements of identified fish, wildlife or invertebrate species	Landowner has no fish and wildlife habitat objective for the land unit  * Planner must still inform the landowner about the potential habitat importance and opportunities for their land. See Required Assessment Tool Client Interview: Additional Interview Notes.	Habitat resource concerns (limitations to wildlife), target species/habitats, and plan alternatives are identified and documented within the Wildlife Habitat Plan. <b>OR</b>  WHSI rating $\geq 0.7$ (for all NRCS habitat models used) <b>AND</b> (when surface stream present) [SVAP2 – fish habitat complexity element score $\geq 7$ <b>AND</b> SVAP2– aquatic invertebrate habitat element score $\geq 7$ ] <b>OR</b> Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds <b>OR</b> Food is available in quality and extent to support habitat requirements for the species of interest	<b>R</b> - Planner Field Assessment  * <b>R</b> - Client Interview: 'Additional Customer Interview Notes:' section of the Customer Interview form is completed and client is provided information regarding wildlife benefit opportunities  <b>R</b> - Wildlife Habitat Plan Template  Species-specific wildlife habitat assessment tools  SVAP2  Generalized WHSI Index finalized by States, and detailed models by selected species and habitat type
<b>INADEQUATE HABITAT FOR FISH AND WILDLIFE – Habitat degradation (continued)</b>	Quantity, quality or connectivity water is inadequate to meet requirements of identified fish, wildlife or invertebrate species.	All with “wildlife” modifier - (Required when Land Use has a wildlife modifier)	Quantity, quality of water is inadequate to meet requirements of identified fish, wildlife or invertebrate species	Landowner has no fish and wildlife habitat objective for the land unit  * Planner must still inform the landowner about the potential habitat importance and opportunities for their land. See Required Assessment Tool Client Interview: Additional Interview Notes.	Habitat resource concerns (limitations to wildlife), target species/habitats, and plan alternatives are identified and documented within the Wildlife Habitat Plan. <b>OR</b>  WHSI rating $\geq 0.7$ (for all NRCS habitat models used) <b>AND</b> (when surface stream present) SVAP2 – aquatic invertebrate habitat element score $\geq 7$ <b>OR</b> Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds <b>OR</b> Water is available in quality and extent to support habitat requirements for the species of interest	<b>R</b> - Planner Field Assessment  * <b>R</b> - Client Interview: 'Additional Customer Interview Notes:' section of the Customer Interview form is completed and client is provided information regarding wildlife benefit opportunities  <b>R</b> - Wildlife Habitat Plan Template  Species-specific wildlife habitat assessment tools  SVAP2  Generalized WHSI Index finalized by States, and detailed models by selected species and habitat type

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ANIMAL	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<p><b>INADEQUATE HABITAT FOR FISH AND WILDLIFE – Habitat degradation</b> (continued)</p>	<p>Quantity, quality of cover and shelter is inadequate to meet requirements of identified fish, wildlife or invertebrate species.</p>	<p>All with “wildlife” modifier - (Required when Land Use has a wildlife modifier)</p>	<p>Quantity and quality of cover and shelter is inadequate to meet requirements of identified fish, wildlife or invertebrate species</p>	<p>Landowner has no fish and wildlife habitat objective for the land unit</p> <p>* Planner must still inform the landowner about the potential habitat importance and opportunities for their land. See Required Assessment Tool Client Interview: Additional Interview Notes.</p>	<p>Habitat resource concerns (limitations to wildlife), target species/habitats, and plan alternatives are identified and documented within the Wildlife Habitat Plan. <b>OR</b></p> <p>WHSI rating <math>\geq 0.7</math> (for all NRCS habitat models used) <b>AND</b> (when surface stream present) [SVAP2 – barriers to movement element score <math>\geq 7</math> <b>AND</b> SVAP2 – fish habitat complexity element score <math>\geq 7</math> <b>AND</b> SVAP2–aquatic invertebrate habitat element score <math>\geq 7</math> ] <b>OR</b></p> <p>Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds</p> <p><b>OR</b></p> <p>Cover is of available quality and extent to support habitat requirements for the species of interest</p>	<p><b>R</b> - Planner Field Assessment</p> <p><b>*R</b> - Client Interview: 'Additional Customer Interview Notes:' section of the Customer Interview form is completed and client is provided information regarding wildlife benefit opportunities</p> <p><b>R</b> - Wildlife Habitat Plan Template</p> <p>Species-specific wildlife habitat assessment tools</p> <p>SVAP2</p> <p>Generalized WHSI Index finalized by States, and detailed models by selected species and habitat type</p>
<p><b>INADEQUATE HABITAT FOR FISH AND WILDLIFE – Habitat degradation</b> (continued)</p>	<p>Quantity, quality of space is inadequate to meet requirements of identified fish, wildlife or invertebrate species.</p>	<p>All with “wildlife” modifier - (Required when Land Use has a wildlife modifier)</p>	<p>Habitat continuity and/or space is inadequate to meet requirements of identified fish, wildlife or invertebrate species</p>	<p>Landowner has no fish and wildlife habitat objective for the land unit</p> <p>* Planner must still inform the landowner about the potential habitat importance and opportunities for their land. See Required Assessment Tool Client Interview: Additional Interview Notes.</p>	<p>Habitat resource concerns (limitations to wildlife), target species/habitats, and plan alternatives are identified and documented within the Wildlife Habitat Plan. <b>OR</b></p> <p>WHSI rating <math>\geq 0.7</math> (for all NRCS habitat models used) <b>AND</b> (when surface stream present) [SVAP2 – barriers to movement element score <math>\geq 7</math> <b>AND</b> SVAP2–aquatic invertebrate habitat element score <math>\geq 7</math> ] <b>OR</b></p> <p>Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds</p> <p><b>OR</b></p> <p>The connectivity of habitat components are adequate to support stable populations of targeted species</p>	<p><b>R</b> - Planner Field Assessment</p> <p><b>*R</b> - Client Interview: 'Additional Customer Interview Notes:' section of the Customer Interview form is completed and client is provided information regarding wildlife benefit opportunities</p> <p><b>R</b> - Wildlife Habitat Plan Template</p> <p>Species-specific wildlife habitat assessment tools</p> <p>Species-specific wildlife habitat assessment tools</p> <p>SVAP2</p> <p>Generalized WHSI Index finalized by States, and detailed models by selected species and habitat type</p>

## Resource Concerns and Conservation Planning Criteria

10/1/2013 VT

ANIMAL	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>LIVESTOCK PRODUCTION LIMITATION – Inadequate feed and forage</b>	Feed and forage quality or quantity is inadequate for nutritional needs and production goals of the kinds and classes of livestock.	<ul style="list-style-type: none"> <li>All with “grazed” modifier (Applicable when Land Use is grazed)</li> </ul>			Livestock forage, roughage and supplemental nutritional requirements addressed.	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview VT NRCS Livestock Forage Balance worksheets.
<b>LIVESTOCK PRODUCTION LIMITATION – Inadequate livestock shelter</b>	Livestock lack adequate shelter from climatic conditions to maintain health or production goals.	<ul style="list-style-type: none"> <li>All with “grazed” modifier (Applicable when Land Use is grazed)</li> </ul>			Artificial or natural shelters meet animal health needs and client objectives.	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview
<b>LIVESTOCK PRODUCTION LIMITATION – Inadequate livestock water</b>	Quantity, quality and/or distribution of drinking water are insufficient to maintain health or production goals for the kinds and classes of livestock.	<ul style="list-style-type: none"> <li>All with “grazed” modifier (Applicable when Land Use is grazed)</li> </ul>			Water of acceptable quality and quantity adequately distributed to meet animal needs.	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview
ENERGY	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>INEFFICIENT ENERGY USE – Equipment and facilities</b>	Inefficient use of energy in the Farm Operation increases dependence on non-renewable energy sources that can be addressed through improved energy efficiency and the use of on-farm renewable energy sources. As an example, this concern addresses inefficient energy use in pumping plants, on-farm processing, drying and storage.	<ul style="list-style-type: none"> <li>All</li> </ul>		Client is not interested in improving equipment and facilities energy efficiency	A USDA approved energy audit been implemented that address equipment and facilities to meet client objectives <b>OR</b> On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview USDA approved Energy Audit NRCS Energy Estimator
<b>INEFFICIENT ENERGY USE – Farming/ranching practices and field operations</b>	Inefficient use of energy in field operations increases dependence on non-renewable energy sources that can be addressed through improved efficiency and the use of on-farm renewable energy sources.	<ul style="list-style-type: none"> <li>All</li> </ul>		Client is not interested in improving energy use in farm and ranch field operations	A USDA approved energy audit been implemented that address field operations to meet client objectives <b>OR</b> On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives	<b>R</b> - Planner Field Assessment <b>R</b> - Client Interview USDA approved Energy Audit NRCS Energy Estimator Conservation on the Farm Checklist (CSP Farmer Self-evaluation)

## Resource Concerns and Conservation Planning Criteria

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AIR	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>AIR QUALITY IMPACTS - Emissions of Particulate Matter - PM - and PM Precursors</b>	Direct emissions of particulate matter - dust and smoke -, as well as the formation of fine particulate matter in the atmosphere from other agricultural emissions - ammonia, NOx, and VOCs - cause multiple environmental impacts, such as: - The unintended movement of particulate matter - typically dust or smoke - results in safety or nuisance visibility restriction. - The unintended movement of particulate matter and/or chemical droplets results in unwanted deposits on surfaces. - Increased atmospheric concentrations of particulate matter can impact human and animal health and degrade regional visibility.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Pasture</li> <li>• Forest</li> <li>• Other Rural Land</li> <li>• Associated Ag Land</li> <li>• Designated Protected Areas</li> <li>• Developed Land</li> <li>• Farmsteads</li> </ul>		Activities are not present that contribute to agricultural source PM or PM precursor emissions PM Producing Activity Examples: • Prescribed Burn is conducted • Travel ways unpaved or untreated with binding agents • Engines (combustion source) • Tillage • Pesticides are applied • Fertilization (manure/ commercial) • CAFO/manure management) <b>AND</b> Episodes or complaints of emissions of PM (dust, smoke, exhaust, etc.), or chemical drift have not occurred	PM and PM Precursor emissions are managed to meet client objectives	R - Planner Field Assessment  R - Client Interview
<b>AIR QUALITY IMPACTS - Emissions of Greenhouse Gases - GHGs</b>	Emissions increase atmospheric concentrations of greenhouse gases.	<ul style="list-style-type: none"> <li>• All</li> </ul>		Activities are not present that produce GHGs emissions GHG Producing Activities: •Fertilization (manure/commercial) •CAFO/manure management •Engines (combustion source) •Tillage <b>AND</b> GHGs are not regulated in this planning area	Greenhouse gas emissions are managed to meet client objectives	R - Planner Field Assessment  R - Client Interview
<b>AIR QUALITY IMPACTS - Emissions of Ozone Precursors</b>	Emissions of ozone precursors - NOx and VOCs - resulting in formation of ground- level ozone that cause negative impacts to plants and animals.	<ul style="list-style-type: none"> <li>• All</li> </ul>		Operations are not present that produce ozone precursor emissions Ozone precursor producing activities: • Engines (combustion source) • Pesticide application • Burning • CAFO/manure management • Fertilization (manure /commercial)	Ozone precursor emissions are managed to meet client objectives	R - Planner Field Assessment  R - Client Interview

## Resource Concerns and Conservation Planning Criteria

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AIR	Description	Land Use	Component	Screening	Assessment Level	Assessment Tools
<b>AIR QUALITY IMPACTS - Objectionable odors</b>	Emissions of odorous compounds - VOCs, ammonia and odorous sulfur compounds - cause nuisance conditions.	<ul style="list-style-type: none"> <li>• Crop</li> <li>• Pasture</li> <li>• Farmsteads</li> <li>• Other Rural Land</li> </ul>		Activities are not present that contribute to odor nuisance air quality conditions Odor nuisance producing activities: <ul style="list-style-type: none"> <li>• Pesticide application</li> <li>• CAFO / manure management</li> <li>• Composting is conducted</li> </ul> <b>AND</b> Odor sources are not regulated in this planning area <b>AND</b> Episodes or complaints of odor nuisance have not occurred	Odors are managed to meet client objectives <b>AND</b> Odors are managed to reduce or eliminate concerns/complaints from the general public	<b>R</b> - Planner Field Assessment  <b>R</b> - Client Interview  Olfactory Assessment