

CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed

Soil Erosion

Sheet and Rill Erosion

Planning Criteria

Planning Criteria Met

Permanent ground cover greater than 90% and slope less than 10%; OR, The water erosion rate is less than or equal to T.

Yes No

Evaluation Tests

Evaluation Test Met

Field slopes are less than 3%; OR, Annual crops are grown in rows across the slope or on the contour.

Yes No

All hayed acres maintain at least 75% cover all year.

Yes No

A residue and tillage management system is implemented on all crops in the rotation that minimizes detachment and transport of soil particles caused by rainfall or irrigation. The system leaves crop residue on the soil surface and excludes primary inversion tillage implements (such as moldboard plow).

Yes No

Ephemeral Gully Erosion

Planning Criteria

Planning Criteria Met

Ephemeral gullies are not occurring; OR, Conservation practices and management activities are in place to prevent or control ephemeral gullies.

Yes No

Evaluation Tests

Evaluation Test Met

Temporary or permanent rills do not exist on the land management system; Or, All temporary or permanent rills are stabilized; AND all areas expected to have high erosion rates are stable.

Yes No

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Classic Gully Erosion**

Planning Criteria

Classic gullies are not present; Or, Classic gully management is adequate to stop the progression of head cutting and widening and offsite impacts are minimized by vegetation and/or structures.

Planning Criteria Met

Yes No

Evaluation Tests

Classic Gullies are not present; Or, All classic gullies are stabilized; AND, All areas expected to have high erosion rates are stable.

Evaluation Test Met

Yes No

Streambank, Shoreline, Water Conveyance Channels

Planning Criteria

For shorelines and water conveyance channels; banks are stable or commensurate with normal geomorphological processes; AND, If bank erosion is present, it is beyond the client's control or commensurate with normal geomorphological processes; AND, For streambanks, SVAP2 bank condition element score greater than 5. If shorelines or water conveyance channels are not present, set this planning criteria to NA.

Planning Criteria Met

Yes No

Evaluation Tests

Excluding all fundamentally unstable, natural geomorphic streambanks and shorelines, all streambanks and shorelines on the land use show few signs of erosion or bank failure; AND, Each is stable and protected with natural materials. If shorelines and water conveyance channels do not exist on the land management system, set this test statement to NA.

Evaluation Test Met

Yes No

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Soil Quality Degradation

Organic Matter Depletion

Planning Criteria

Planning Criteria Met

Organic matter is not depleted below tolerable levels. SCI levels are greater than 0 on all fields in the land management system.

Yes No

Evaluation Tests

Evaluation Test Met

Cover crops are included in the crop rotation on 50% or more of the fields in the land management system to maintain adequate levels of soil organic matter.

Yes No

Tillage methods that lift/invert soil are not used. There is at least 30% residue cover on the soil surface at time of planting.

Yes No

Compaction

Planning Criteria

Planning Criteria Met

Soil compaction is not a problem: AND, Activities do not cause soil compaction problems AND can be documented with prior conservation planning or other on-site evaluation methods.

Yes No

Evaluation Tests

Evaluation Test Met

The crop rotation includes crops/cover crops with deep roots that extend through the soil profile to break up compacted layers. (see state lists)

Yes No

Field operations are restricted or do not take place on wet soils susceptible to compaction.

Yes No

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Concentration of Salts and other Chemicals

Planning Criteria

Planning Criteria Met

Salinity/sodicity problems do not exist: OR, Conservation practices and managements are in place to mitigate on-site effects.

Yes No

Evaluation Tests

Evaluation Test Met

Irrigation water is managed to maintain a balance of soil moisture not to exceed Field Capacity or get below wilting point (unless water quantity is a limitation)? Methods include: moisture by feel, soil moisture monitoring with sensors, evapotranspiration monitoring, or other checkbook type methods. If the land management system is not irrigated, set this test statement to NA.

Yes No

Unconventional soil amendments are not applied; OR, If applied, are tested prior to application to fields and are applied according to a nutrient management system. These amendments could include industrial waste, bio-solids, organics, etc.

Yes No

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Excess Water

Runoff and Flooding and Ponding

Planning Criteria

Planning Criteria Met

Excess water is managed to minimize the impact on conservation measures and/or crop production.

Yes No

Evaluation Tests

Evaluation Test Met

Measures are applied such as residue management, grassed waterways, terraces, diversions, or filter strips to reduce excessive runoff; OR, If flooding is a concern crops and field activities are managed within the seasonal flooding periods; OR, Where ponding is a concern land leveling or shallow surface drains prevent ponding of water that limits crop production.

Yes No

Seasonal High Water Table

Planning Criteria

Planning Criteria Met

Excess water resulting from a seasonal high water table is managed to prevent significant negative effects to conservation measures and/or crop production. If seasonal high water tables do not exist, set this planning criteria to NA.

Yes No

Evaluation Tests

Evaluation Test Met

Tile drainage and drainage water management structures have been installed to ease the harmful effects of a seasonal high water table; AND, The discharge of surface/subsurface drainage systems are as prescribed by the drainage water management plan. If seasonal high water tables do not exist in the land management system, set this test statement to NA.

Yes No

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Insufficient Water

Inefficient Use of Irrigation Water

Planning Criteria

The irrigation system components and management result in a Farm Irrigation Rating Index greater than 60; AND, Meets applicable State in-stream flow and lake and pond water levels requirements. If the land management system is not irrigated, set this planning criteria to NA.

Planning Criteria Met

Yes No

Evaluation Tests

A reduced/mulch till or no-till system is implemented which leaves a minimum of 30% ground crop residue on the soil surface after planting. If the land management system is not irrigated, set this test statement to NA.

Evaluation Test Met

Yes No

An irrigation water management (IWM) plan is followed that meets the crop's needs, while maximizing irrigation water efficiency. The IWM plan schedules water application based on soil moisture monitoring and/or evapotranspiration monitoring, measures and records the amount of water used to irrigate, and the irrigation system's distribution uniformity has been evaluated and necessary changes were made. If the land management system is not irrigated, set this test statement to NA.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Inefficient Moisture Management**

Planning Criteria

Planning Criteria Met

Runoff and evapotranspiration levels are minimized on cropland. Soil loss levels are less than or equal to T, crop interval STIR values are less than 80, and SCI is 0 or greater.

Yes No

Evaluation Tests

Evaluation Test Met

Cover crops are terminated based on RMA guidelines. If cover crops are not incorporated into the rotation, set this test statement to NA.

Yes No

A reduced/mulch till or no-till system is implemented which leaves a minimum of 30% ground crop residue on the soil surface after planting.

Yes No

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Water Quality Degradation

Pesticides in Surface Water

Planning Criteria

Planning Criteria Met

Pesticides are stored, handled, disposed and applied to prevent runoff, spills, leaks and leaching; AND, Conservation practices and techniques are in place to minimize ground water impacts.

Yes No

Evaluation Tests

Evaluation Test Met

Pesticides are not applied or stored on this land management system; Or, Pesticides are applied using a site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies. Environmental risk screening tool are used (such as WIN-PST or similar LGU approved tool); AND, application rates and timing are compliant with the label.

Yes No

Pesticides in Ground water

Planning Criteria

Planning Criteria Met

Pesticides are stored, handled, disposed and applied to prevent runoff, spills, leaks and leaching; AND, Conservation practices and techniques are in place to minimize ground water impacts.

Yes No

Evaluation Tests

Evaluation Test Met

Pesticides are not applied or stored on this land management system; OR, Pesticides are applied using a site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies; AND, Environmental risk screening tool are used (such as WIN-PST or similar LGU approved tool); AND, Application rates and timing are compliant with the label.

Yes No

CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Nutrients in Surface water

Planning Criteria

Planning Criteria Met

Organic or inorganic nutrients are not applied and PLU is not grazed; OR Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields and conservation practices and management practices are in place to minimize surface water impacts.

Yes No

Evaluation Tests

Evaluation Test Met

Filter strips that are at least 30 feet wide are established and maintained on all areas in the land management system where filter strips are applicable.

Yes No

The land adjacent to a stream, river, or other waterbody on the side or sides you control: - has diverse, natural plant cover typical to that along other streams within the drainage basin; - extend from the stream bank/shoreline for a distance of 35 feet; OR, (if applicable) The minimum State buffer-width requirement, whichever is greater; AND, Have few places where concentrated runoff flows through.

Yes No

Livestock access to streams is limited to short periods of time and small areas.

Yes No

The discharge of surface/subsurface drainage systems are as prescribed by the drainage water management plan.

Yes No

Nutrients are not applied on this land management system; OR, If nutrients are applied, a nutrient budget is used to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests (less than or equal to 3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Previous applications of manure and other organic based materials, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Nutrients in Groundwater**

Planning Criteria

Organic or inorganic nutrients are not applied and PLU is not grazed; OR, Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields and conservation practices: AND, Management activities are in place to minimize ground water impacts.

Planning Criteria Met

Yes No

Evaluation Tests

Nutrients are not applied on this land management system; OR, if nutrients are applied, a nutrient budget is used to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests (less than or equal to 3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Previous applications of manure and other organic based materials, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications.

Evaluation Test Met

Yes No

CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set Crop Annual/Mixed Excess Pathogens and Chemicals from Manure, bio-solids or Compost Applications in Surface Water

Planning Criteria

Planning Criteria Met

Potential sources of pathogens or pharmaceuticals are not applied on the land; OR, Organic materials are applied, stored, and/or handled to mitigate negative impacts to surface water sources.

Yes No

Evaluation Tests

Evaluation Test Met

Manure, Composts, or other bio-solids are not stored or applied on this land management system; OR Manure and other bio solids are applied using a nutrient budget to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests (less than or equal to 3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Avoiding manure applications when soils are frozen, snow covered, or saturated, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications. Minimum setbacks are maintained from drainage ways, wells, ditched, streams, rivers, and water bodies. If manure or other bio solids are not applied, set this test statement to NA.

Yes No

Filter strips that are at least 30 feet wide are established and maintained on all areas in the land management system where filter strips are applicable.

Yes No

Livestock access to stream is controlled; OR, Livestock are limited to small watering or crossing areas.

Yes No

CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed Excess Pathogens and Chemicals from Manure, bio-solids or Compost Applications in Ground Water

Planning Criteria

Planning Criteria Met

Potential sources of pathogens or pharmaceuticals are not stored or applied on the land; OR, Organic materials are applied, stored, and/or handled to mitigate negative impacts to groundwater sources.

Yes No

Evaluation Tests

Evaluation Test Met

Manure and other bio-solids are not stored or applied on this land management system; OR Manure and other bio solids are applied using a nutrient budget to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests (less than or equal to 3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Avoiding manure applications when soils are frozen, snow covered, or saturated, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications. Minimum setbacks are maintained from drainage ways, wells, ditched, streams, rivers, and water bodies.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Petroleum, Heavy Metal and Other Pollutants Transported to Surface Water**

Planning Criteria

Planning Criteria Met

Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. If present, potential pollutants are stored and handled to avoid runoff to groundwater.

Yes No

Evaluation Tests

Evaluation Test Met

Fuel storage does not occur on this land management system; OR, If required, the producer has and is following a Spill Prevention, Control, and Countermeasure (SPCC) Plan; OR, The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well; AND, Within a stable place designed to provide secondary containment if the primary means were to fail.

Yes No

Petroleum, Heavy Metal and Other Pollutants Transported to Ground Water

Planning Criteria

Planning Criteria Met

Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. If present, potential pollutants are stored and handled to avoid seepage to groundwater.

Yes No

Evaluation Tests

Evaluation Test Met

Fuel storage does not occur on this land management system; OR, If required, the producer has and is following a Spill Prevention, Control, and Countermeasure (SPCC) Plan; OR, The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well; AND, Within a stable place designed to provide secondary containment if the primary means were to fail.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Excessive Sediment in Surface Water**

Planning Criteria

Planning Criteria Met

Upslope treatment and buffer practices address concentrated flows to water bodies; AND, The SVAP2 - bank condition greater than or equal to 5; AND, The livestock and vehicle water crossings are stable; AND, The water erosion rate is less than or equal to T; AND, Wind erosion rate is less than or equal to T.

Yes No

Evaluation Tests

Evaluation Test Met

Drainage and erosion control measures are implemented on roads, trails and landings to minimize detrimental effects of concentrated flow, erosion and sedimentation; AND, Stream crossings are restored and stabilized.

Yes No

All hayed acres maintain at least 75% cover all year.

Yes No

All temporary or permanent rills and gullies are stabilized; OR, Temporary or permanent rills and gullies do not exist.

Yes No

Established filter strips are at least 20 feet wide and maintained when filter strips are applicable. If filter strips are not applicable on this land management system, set the test statement to NA.

Yes No

The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area, - extend from the stream bank/shoreline for a distance of 35 feet or (if applicable) the minimum State buffer-width requirement, whichever is greater; AND, Have few places where concentrated runoff flows through.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Elevated Water Temperature**

Planning Criteria

Water courses on or adjacent to the site are not designated by a State Agency as a temperature impairment; OR, The SVAP2 - riparian area quality element score is greater than or equal to 5; AND, The SVAP2 - riparian area quantity element score is greater than or equal to 5; AND, The SVAP2 - canopy cover element score is greater than or equal to 6; OR, Existing conservation practices are in place to address water temperature. If water courses are not present, set this planning criteria to NA.

Planning Criteria Met

Yes No

Evaluation Tests

More than 50% of the water surface is shaded on the length of the stream/river for this land management system. If waterbodies are not present on this land management system, set the test statement to NA.

Evaluation Test Met

Yes No

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Air Quality Impacts

Emissions of Particulate Matter (PM) and PM Precursors

Planning Criteria

Management activities do not contribute to agricultural source particulate matter (PM) or PM precursor emissions; AND, documented episodes or complaints of emissions of PM (dust, smoke, exhaust, etc.), or chemical drift have not occurred. PM producing activity examples are: 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.

Planning Criteria Met

Yes No

Evaluation Tests

Field operations and activities are managed to minimize particulate emissions on the farm (i.e. multi-operation field tools, precision guidance systems, Prescribed Burn plans are implemented, and treatment/management of all non-vegetated, unpaved travel ways.)

Evaluation Test Met

Yes No

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Emissions of Ozone Precursors

Planning Criteria

Planning Criteria Met

Operations that produce ozone precursor emissions are not present; OR, or are managed to reduce emissions. Ozone precursor producing activities may include: Engines (combustion source), Pesticide application, Burning, CAFO /manure management, or fertilization (manure/commercial).

Yes No

Evaluation Tests

Evaluation Test Met

Pesticides are not applied; OR, an IPM plan is followed which reduces ozone precursors. IPM includes applications of pesticides, including fumigants, be applied in a way that emissions of ozone precursors are reduced; Application methods may include: spot spraying, pest/target sensing application equipment, alternative pesticide formulations, or low emission fumigation methods.

Yes No

Nitrogen stabilizers are used when any nitrogen is applied. If nitrogen is not applied, set this test statement to NA.

Yes No

Emission of Greenhouse Gases (GHGs)

Planning Criteria

Planning Criteria Met

Activities that produce GHGs emissions are not present: OR, activities that produce GHGs emissions are managed to reduce those emissions; AND, Carbon sequestration is enhanced through reduced tillage methods or other practices. GHG producing activities that should be considered include: Fertilization (manure/commercial), Tillage methods, grazing management, and forestry practices; AND GHGs are not regulated in this planning area.

Yes No

Evaluation Tests

Evaluation Test Met

Nitrogen is not applied: OR, nitrogen is applied as close as possible to crop uptake (within 30 days prior to crop planting or greenup) at recommended application rates.

Yes No

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Objectionable Odors

Planning Criteria

Planning Criteria Met

Activities such as pesticide or manure application are managed to reduce objectionable odors; AND, Odor sources are not regulated in this planning area; AND, Documented episodes or complaints of odor nuisance have not occurred.

Yes No

Evaluation Tests

Evaluation Test Met

Nutrients are not applied; OR, A NMP is followed which protects air quality by reducing odors and nitrogen emissions (ammonia, oxides of nitrogen).

Yes No

Manure is not applied on this land management system; OR, manure is immediately incorporated; OR, manure is only applied when wind direction is away from human occupied areas.

Yes No

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Degraded Plant Condition

Undesirable Plant Productivity and Health

Planning Criteria

Plants are adapted to the site, meet production goals, and do not negatively impact other resources; AND, Plant damage from wind erosion is below crop damage tolerance levels.

Planning Criteria Met

Yes No

Evaluation Tests

Plants and crops are adapted to the soil and site conditions; and, plants produce average yield levels for the county in typical years.

Evaluation Test Met

Yes No

Inadequate Structure and Composition

Planning Criteria

Plant communities contain adequate diversity, composition and structure to support desired ecological functions for the ecological site.

Planning Criteria Met

Yes No

Evaluation Tests

The current plants provide the desired habitat structure and composition. State identified invasive plants and noxious weeds are controlled.

Evaluation Test Met

Yes No

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Excessive Plant Pest Pressure

Planning Criteria

Planning Criteria Met

Plant pest damage to plants is below economic or environmental thresholds; AND, plant pests, including noxious and invasive species are managed.

Yes No

Evaluation Tests

Evaluation Test Met

Invasive and noxious weeds are controlled or are not present.

Yes No

Weeds, insects, and diseases do not limit crop production.

Yes No

Wildfire Hazard, Excessive Biomass Accumulation

Planning Criteria

Planning Criteria Met

Wildfire hazards is not a concern; OR, Fuel loads and fuel ladders are managed to provide defensible space.

Yes No

Evaluation Tests

Evaluation Test Met

Fire is not a typical hazard for the crop; OR, Fire protection measures such as firebreaks or activities to reduce the fuel loads around or within the crop fields are employed.

Yes No

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Fish and Wildlife - Inadequate Habitat

Inadequate Habitat - Food

Planning Criteria

The WHSI rating is greater than or equal to 0.5; AND, (when surface stream present) The SVAP2 - fish habitat complexity element score is greater than or equal to 7; AND, The SVAP2 - aquatic invertebrate habitat element score is greater than or equal to 7; OR, Conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds; OR, Food is available in quality and extent to support habitat requirements for the species of interest.

Planning Criteria Met

Yes No

Evaluation Tests

Unharvested grain crops are intentionally left in the field as wildlife food on an annual basis; OR, A no-till system is used that provides food for selected wildlife species.

Evaluation Test Met

Yes No

Designated areas are planted as food and habitat for pollinators/beneficial insects; AND, Protected from disruption. For example, planted to nectar and pollen producing plants and protected from disruption - chemical, biological, or mechanical.

Yes No

Inadequate Habitat - Cover/Shelter

Planning Criteria

The WHSI rating is greater than or equal to 0.5; AND, (when surface stream present) the SVAP2 - barriers to movement element score is greater than or equal to 7; AND, the SVAP2 - fish habitat complexity element score is greater than or equal to 7; AND, the SVAP2 - aquatic invertebrate habitat element score is greater than or equal to 7; OR conservation practices and management practices are in place that meet or exceed species or guild-specific habitat model thresholds; OR, habitat cover is of available quality and extent to support requirements for the species of interest.

Planning Criteria Met

Yes No

Evaluation Tests

Evaluation Test Met

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All floodable fields in the land management system are managed to maintain surface water at least 4 months per year; AND, artificial supplied water or rainfall are from typical sources. Yes No

A rotational scheme is used that simulates wet, early successional habitats that are highly attractive to wetland-associated wildlife. Yes No

A no-till system is used that provides cover for wildlife. The orientation of the residue between harvest and establishment of the new crop supports wildlife cover. Yes No

Established field borders are kept as wildlife cover and as pollinator/beneficial insect habitat. Yes No

Designated areas are planted as food and habitat for pollinators/beneficial insects. For example, planted to nectar and pollen producing plants and protected from disruption--chemical, biological, or mechanical. Yes No

Plant growth and cover is managed to develop and maintain habitat to help chosen wildlife species. (see State Wildlife Action Plan) Yes No

The stream(s) have: - a natural, unaltered configuration, with minimal channel straightening, dredging, or bank alteration by armoring with rip-rap or other non-natural materials, - stable banks with limited erosion or bank failure; AND, human uses and/or grazing levels that do not negatively impact bank condition. If streams are not present on the land management system, set the test statement to NA. Yes No

The pond/lake, which supports a natural or planted fish population, is managed: -to exclude livestock, -to control nuisance species and undesirable aquatic vegetation controlled, -to complies with state and local regulations when stocking the pond, AND -use of a buffer zone of diverse, natural plant cover at least 35 feet wide. Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Inadequate Habitat - Habitat Continuity (Space)**

Planning Criteria

Planning Criteria Met

The WHSI rating is greater than or equal to 0.5; AND, (when surface stream present) The SVAP2 - barriers to movement element score is greater than or equal to 7; AND, The SVAP2 - aquatic invertebrate habitat element score is greater than or equal to 7; OR, Conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds; OR, The connectivity of habitat components are adequate to support stable populations of target species.

Yes No

Evaluation Tests

Evaluation Test Met

Established field borders are kept as wildlife cover and as pollinator and beneficial insect habitat.

Yes No

Designated areas are planted as habitat for pollinators and beneficial insects. Non-cropped area protected from disruption during nesting and foraging periods--chemical, biological, or mechanical.

Yes No

The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area; AND, Extend from the stream bank or shoreline for a distance of 35 feet; OR, (if applicable) The minimum State buffer-width requirement, whichever is greater.

Yes No

In-stream structures (i.e. dam, diversion structure, bridge, culvert, low-water stream crossing, etc.) allow for the upstream and downstream movement of fish and other aquatic animals throughout most of the year.

Yes No

Connectivity between food resources and cover and shelter is provided for the target wildlife species. (see State Wildlife Action Plan)

Yes No

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Livestock Production Limitation

Inadequate Feed and forage

Planning Criteria

Planning Criteria Met

Livestock forage, roughage, and supplemental nutritional requirements are met.

Yes No

Evaluation Tests

Evaluation Test Met

The current crop rotation provides ample feed and/or forages to support the livestock on the farm. Soil erosion and compaction are managed to reduce negative impacts. Set this test statement to NA if the land management system is not used for livestock production.

Yes No

Inadequate Shelter

Planning Criteria

Planning Criteria Met

Artificial or natural shelters meet animal health needs.

Yes No

Evaluation Tests

Evaluation Test Met

Adequate shelter is provided to meet the needs of the livestock throughout the period the land management system (LMS) is utilized by livestock. If livestock do not use this LMS, set the test statement to NA.

Yes No

**CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed
Inadequate Water**

Planning Criteria

Planning Criteria Met

Water of acceptable quality and quantity is adequately distributed to meet animal needs.

Yes No

Evaluation Tests

Evaluation Test Met

The livestock have enough drinking water of good quality. If livestock do not use this land management system, set the test statement to NA.

Yes No

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Inefficient Energy Use

Equipment and Facilities

Planning Criteria

Planning Criteria Met

On-site renewable energy and/or energy conserving implements have been implemented to improve energy efficiency for field operations.

Yes No

Evaluation Tests

Evaluation Test Met

Energy conserving implements are used for all or some field operations.

Yes No

Pumps, motors, wells, etc. located on the land management system are improved efficiency models.

Yes No

CSP-2018-1 TN - Statewide MRBI - Ag Land Evaluation Set_Crop Annual/Mixed Farming/Ranching Practices and Field Operations

Planning Criteria

Planning Criteria Met

Reduced tillage systems or energy conserving implements are being used to improve energy efficiency for field operations. If irrigated, improved efficiency irrigation pumps are being used on the majority of irrigated fields.

Yes No

Evaluation Tests

Evaluation Test Met

Reduced tillage and other field operations are used to reduce field passes and overall energy consumption.

Yes No

Improved efficiency irrigation pumps and motors are used for more than 50% of irrigation water applications. If the land management system is not irrigated, set this test statement to NA.

Yes No

Irrigation water is being managed to maintain a balance of soil moisture not to exceed Field Capacity or get below wilting point (unless water quantity is a limitation). Methods include: soil moisture monitoring with sensors, evapotranspiration monitoring, or other checkbook type methods. If the land management system is not irrigated, set this test statement to NA.

Yes No

Pumps, motors, wells, etc. located on the land management system are improved efficiency models

Yes No