



## ORGANIC FARMING RESEARCH FOUNDATION

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To: Mr. Bill Reck, National Environmental Engineer  
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From: Mark Schonbeck, Research Associate  
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Re: Draft comments on Proposed Revisions to the National Handbook of  
Conservation Practices for the Natural Resources Conservation Service  
Federal Register, Vol 89, No. 23, pages 7358-60, February 2, 2024.  
**Docket No. NRCS–2023–0022**

On behalf of the Organic Farming Research Foundation (OFRF) we thank the USDA Natural Resources Conservation Service (NRCS) for this opportunity to review proposed revisions to the Conservation Practice Standards listed in the Federal Register notice of February 2, 2024.

OFRF (<https://ofrf.org>) is a national non-profit organization that serves the organic farming sector through research, education, and advocacy. Our work includes in-depth analysis of USDA funded organic research, development of educational materials to help organic farmers and ranchers apply research findings to optimize production and conservation outcomes, and surveys of organic producers to identify current research needs ([2022 National Organic Research Agenda](#)), as well as our small-grant program that has funded more than 300 farmer-led projects since 1990.

OFRF has worked with NRCS under a cooperative agreement to help build the agency's capacity to provide conservation technical and financial assistance to organic and transitioning to-organic farmers and ranchers. In this time of mounting crises of climate disruption, soil degradation, dwindling water resources, and biodiversity losses, organic producers can play a key role in addressing these nationwide challenges through regionally adapted, climate-friendly, and regenerative production and conservation systems.

We believe that, with appropriate revision and modernization, NRCS Conservation Practice Standards (CPS) can support both organic and non-organic farmers to optimize their stewardship of soil, water, and other resources; enhance agricultural resilience to weather extremes and other stresses; and help mitigate the climate crisis through carbon sequestration and reductions in greenhouse gas (GHG) emissions. From this perspective,



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we offer the following comments and recommendations regarding the proposed CPS revisions currently under public review.

## General Recommendations

**1. We endorse the comments and recommendations submitted by the National Sustainable Agriculture Coalition (NSAC) on March 1, 2024 regarding the proposed CPS revisions in the request for comments, Docket No. NRCS-2023-0022, published on February 2, 2024.**

As a Represented Member of the National Sustainable Agriculture Coalition (NSAC), OFRF fully endorses NSAC's in-depth recommendations to NRCS regarding the following Conservation Practice Standards:

- CPS 386 Field Border
- CPS 393 Filter Strip
- CPS 422 Hedgerow Planting
- CPS 484 Mulching
- CPS 528 Grazing Management
- CPS 657 Wetland Restoration

We believe that implementing the NSAC recommendations would increase the efficacy of these six Conservation Practices in helping both organic and non-organic producers reach their resource stewardship goals, enhance the resilience of their operations to the impacts of climate change, and reduce the net GHG footprint of their operations.

**2. We urge NRCS to adopt the following language for USDA certified-organic and transitioning-to-organic operations as part of General Criteria for all eight Practice Standards currently under revision, and for all practice standards as they come up for revision in the future:**

*“For USDA certified-organic and transitioning-to-organic operations, all materials and methods utilized to implement this Conservation Practice must comply with the USDA National Organic Program (NOP) Standards, including all seeds, planting stock, fertilizers, and other production inputs, and any construction materials.”*

Under References, add:

“USDA National Organic Standards,  
<https://www.ams.usda.gov/rules-regulations/organic>.”

The organic method as codified in the USDA National Organic Program (NOP) regulations has tremendous potential to build healthy living soils, protect water resources and biodiversity, provide wildlife and beneficial habitat, improve agricultural resilience to



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extreme weather related to climate change, and reduce the net greenhouse gas (GHG) footprint of a farming or ranching operation. Implementation of NRCS conservation practices can help organic producers realize this potential and simultaneously improve their long-term net economic returns. Each of the six Practices listed above can play vital roles in organic production systems including:

- Protection of organic production areas from unintended introduction of NOP-prohibited substances (CPS 386 Field Border, CPS 393 Filter Strip, and CPS 422 Hedgerow).
- Meeting NOP requirements for livestock access to pasture and ruminant grazing (CPS 528 Grazing Management).
- Providing habitat for pollinators and natural enemies of arthropod pests (CPS 386 Field Border, CPS 422 Hedgerow, CPS 484 Mulching, and CPS 657 Wetland Restoration).
- Meeting NOP requirements to protect soil and water resources, wetlands, woodlands, and wildlife (all six Practices).
- Managing weeds without herbicides and without excessive tillage and cultivation that can threaten soil health (CPS 484 Mulching, CPS 528 Grazing Management).

Organic producers must comply with all NOP requirements in implementing any of these conservation practices; therefore, the above language should be included in the General Criteria in each Practice Standard. We appreciate that NRCS is now offering CPS 823 Organic Management nationwide, which will foster recognition and adoption of organic agriculture as a conservation system. We also acknowledge that the Considerations sections of CPS 386 Field Border, CPS 393 Filter Strip, and CPS 484 Mulching include language on compliance with NOP rules when implementing the practices on organic farms. However, this requirement is in fact a firm Criterion for implementing any conservation practice on organically managed land.

Therefore, we urge NRCS to adopt the above language under General Criteria for each of the Practice Standards currently under review and revision.

### CPS 386 Field Border

Field borders can play multiple roles in organic farming systems including biological pest control and providing buffers against unintended exposure of organic production areas to NOP-prohibited substances as well as the erosion control, water quality, and wildlife purposes noted in both the current standard and proposed revisions.

We urge NRCS to consider the following modifications to the proposed revisions to CPS 386 Field Border to maximize the conservation benefits of the practice in both organic and non-organic operations.



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## **1. Reinstate the Purpose related to soil carbon and soil health as well as reducing net greenhouse gas (GHG) emissions.**

The current Standards lists as a Purpose “Reduce greenhouse gases and increase carbon storage,” and the proposed revision simplifies this to “Reduce emissions of greenhouse gases.” We are concerned that this change de-emphasizes the potential of this practice, which entails planting of perennial herbaceous and/or shrubby vegetation, to build soil and biomass carbon. CPS 386 and its five CSP Enhancements are listed in the soil health section of the Climate Smart Agriculture and Forestry (CSAF) Mitigation Activities List for FY 2024, and the Standard should fully reflect this by stating this purpose in full.

We thank NRCS for retaining the soil health and carbon sequestration criteria for this Purpose including a positive Soil Conditioning Index (SCI), selection of plant species with adequate above and below-ground biomass, and maximizing length and width of the border. We urge NRCS to reinstate the current Purpose Statement as follows:  
*“Reduce greenhouse gas emissions and increase carbon storage.”*

Similarly, the heading for Additional Criteria should read:

*“Additional Criteria to reduce greenhouse gas emissions and increase carbon storage”*

## **2. Include legumes as well as grasses, forbs, and shrubs in the second paragraph of General Criteria as follows (new language in *italics*):**

*“Establish field borders to adapted species of permanent grass, legumes, forbs and/or shrubs that accomplish the design objective.”*

While the term “forbs” can be interpreted as including all broadleaf plants, it is also sometimes understood to mean *non-leguminous* dicots in a pasture such as forage brassicas, chicory, etc. Including legumes in a diversified plant community – whether a crop rotation, grazing lands, or a conservation planting like CPS 386 – enhances the most stable form of soil carbon sequestration – the microbial conversion of root exudates into mineral associated organic matter (MAOM) (Prescott et al., 2021). Some legumes also provide food and habitat for natural enemies of crop pests, and their inclusion in a field border can reduce the need for N fertilizer to sustain the vigor of field border vegetation. Therefore, we recommend that NRCS make specific mention of legumes in General Criteria for field borders as shown above.

## **3. Under Additional Criteria to Provide Food and Cover for Wildlife and Pollinators or Other Beneficial Organisms, we urge NRCS to strengthen the last sentence of the fifth paragraph as follows (new language in *italics*):**



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*“Do not apply pesticides to the field border and minimize exposure of the field border via drift or runoff to pesticides and other chemicals that are potentially harmful to wildlife, pollinators, and other beneficial organisms.*

The current Standard criteria for this purpose include “Avoid exposure ...” which was weakened slightly in the proposed revision to “Minimize exposure ...” While we understand that it may not be practical to avoid all exposure to pesticides and chemicals, especially when drift or runoff from a neighboring farm occurs, the Standard should make it clear that pesticides may not be directly applied to a field border planted for this habitat purpose.

**4. We greatly appreciate NRCS for providing the following guidance for maintaining soil conservation functions under Additional Criteria to Provide Food and Cover for Wildlife, Pollinators or Other Beneficial Organisms, which sometimes require a lower density planting** (NRCS-proposed new language in *italics*):

*“A lower percent groundcover than would be needed if protecting soil and water quality is acceptable under this purpose as long as the soil resource concern is also adequately addressed (i.e., no excessive soil loss). This may be achieved by simply increasing the field border width or adding denser herbaceous strips on the upslope or downslope edges of the field border.*

This is an excellent strategy for achieving multiple purposes of the field border and it supports organic producers in meeting NOP requirements for a biodiverse production system.

**5. In addition to Criteria language for certified organic operations** (see item 2 on page 1), **we urge NRCS to add the following paragraph to General Considerations:**

*“CPS 386 may be utilized by USDA certified organic and transitioning-to-organic operations to protect organic production areas from unintended exposure to NOP-prohibited materials as required in the NOP Standards. For this purpose, install the field border along the perimeter of the organic operation adjacent to the abutting farm or other source of potential exposure, and design the field border to be of sufficient width, height, and density to provide the required buffer.”*

Section § 205.202 Land requirements in the National Organic Standards requires certified producers to “Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.” A suitably located Field Border of sufficient width, height, and vegetative



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density can intercept NOP-prohibited substances entering the farm either via aerial drift or overland flow.

## CPS 393 Filter Strip

CPS 393 Filter Strip can help certified and transitioning organic farmers comply with NOP Standards in two ways: protecting water quality and other natural resources of the operation, and providing buffers against unintended exposure of organic production areas to NOP-prohibited substances, especially via runoff from neighboring non-organic agricultural operations. The Conservation Reserve Program (CRP) Organic Buffers Initiative included CPS 393 in its list of practices for protecting organic operations from exposure to NOP prohibited substances. We recommend the following modifications to the proposed revision of the Standard to facilitate the use of CPS 393 by organic producers for this and other purposes.

**1. We ask NRCS to expand the Definition of the practice to allow installation of a filter strip along a farm boundary to intercept runoff from a neighboring field located upslope, as follows:**

*“A strip or area of herbaceous vegetation, located at the lower edge(s) of a field, or adjacent to the lower edges of an abutting field, that removes contaminants from overland flow.”*

**2. We ask NRCS to add a new Purpose for CPS 393 to reflect this function, as follows:**

*“Protect fields from excess nutrients, chemicals, or sediment in runoff from an abutting upslope field or agricultural operation.”*

**3. We ask NRCS to expand the Conditions Where Practice Applies as follows (new language in italics):**

*“Filter strips are established where environmentally sensitive areas need to be protected from sediment, other suspended solids, and dissolved contaminants in runoff.*

*Environmentally sensitive areas to which this Practice applies include USDA certified cropland or grazing lands or other agricultural operations that would be negatively impacted by contaminants in runoff from upslope abutting agricultural operations.”*

Filter strips are designed to remove contaminants from overland flow and thus can play a vital role in protecting a USDA certified organic or transitioning organic farm from synthetic fertilizers, pesticides, and other NOP-prohibited contaminants in runoff from a neighboring non-organic field or farming operation located immediately adjacent to and





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upslope from an organic operation. Such a filter strip can enable the organic producer to meet NOP Land requirements (Section § 205.202 of USDA Organic Standards) in this situation. However, the proposed revision clarifying that the filter strip must be located *at the lower edge of the field* could be interpreted in a way that excludes this use of Filter Strip unless the definition is further clarified to indicate that it could be located at the lower edge of a neighboring field or agricultural operation to protect a farm from incoming contaminants.

Therefore, we urge NRCS to further modify the Definition as shown in item 1 above, to add the Purpose for the practice outlined in item 2, and to expand the Conditions where Practice Applies as shown in item 3. We believe that these changes are essential to enable organic producers to utilize CPS 393 to simultaneously meet this NOP requirement and other conservation goals. In addition, other agricultural operations may include crops, livestock, or conservation plantings that would be adversely affected by contaminated runoff from a neighboring upslope operation and would benefit from this use of CPS 393 Filter Strip.

### CPS 422 Hedgerow Planting

Hedgerow plantings can help organic producers meet multiple conservation objectives including NOP requirements for biodiversity, wildlife protection, ecologically based pest management, and protection of organic production areas against unintended exposure to NOP-prohibited substances. In addition to adding the General Criteria paragraph for USDA certified organic and transitioning-to-organic operations detailed above (page 2), we recommend the following modifications to the proposed revision to enhance efficacy of this practice.

**1. Expand and clarify the second Purpose as follows** (new language in *italics*):  
“Provide *food and cover* for beneficial ~~invertebrates~~ *organisms* as a component of pest management.”

Arthropod natural enemies of insect pests include predators such as lady beetles, lacewings, and spiders; and parasitoids such as micro-wasps and hover flies. Predators require alternative prey during periods when the target pests are absent or scarce, and the adult phases of parasitic wasps and flies require accessible nectar and pollen sources in order to survive and lay eggs which hatch into the larval life stages that attack pests. Thus, beneficial habitat plantings must provide not only cover but also a diversity of food sources to support biological pest control agents.

In addition to invertebrates, many species of insectivorous birds commonly inhabit hedgerows and prey on pests in nearby crops. Reptiles and amphibians that utilize



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hedgerow habitats can also protect crops by consuming harmful insects, mollusks, and rodents.

Organic farmers depend on multiple biological controls to manage crop pests effectively without resorting to NOP-prohibited pesticides or relying too heavily on NOP-allowed botanical, microbial, or mineral pesticides that can also upset ecological balance to some degree. Therefore, OFRF strongly urges NRCS to expand this Purpose for hedgerows to include both food and cover for both invertebrate and vertebrate natural enemies of crop pests.

**2. Expand Additional Criteria to provide food and cover for beneficial organisms as a component of pest control. Modify the second paragraph as follows (new language in *italics*, deletions in ~~strike through~~):**

“The selected plants, ~~whether~~ *which may include any combination of woody plants, or bunch grasses, and perennial flowering species,* must provide the *food and* habitat needs for the identified beneficial ~~invertebrates~~ *organisms. Choose hedgerow species that provide season-long sources of nectar, pollen, and/or alternative prey to sustain arthropod predators and parasitoids of target pests, nesting sites for insectivorous birds, or cover for ground beetles, amphibians, and reptiles depending on the target pests and natural enemies.*”

We urge NRCS to adopt these expanded criteria in order to enhance the efficacy of this practice for biological pest control in both organic and non-organic production systems.

**3. Encourage the establishment of biodiverse hedgerows that include native plant species by expanding the second paragraph of General Criteria as follows:**

“Select plants that are suited and adapted to soil and site conditions, climate, and conservation purpose. *Utilize two or more species of native perennial plants whenever practical. Combine woody shrubs, small trees, and/or bunch grasses to create the hedgerow structure, and integrate other perennial species as needed to meet conservation objectives.*”

Multispecies hedgerows will likely provide a greater range of environmental benefits and be less prone to damage by extreme weather, pests, and other stresses than single species stands. Native plant species are more likely to benefit indigenous wildlife, pollinators, and beneficial organisms and less likely to have unintended negative impacts than exotic species. While the proposed revision removes a provision in the General Criteria of the current standard that limits hedgerow plantings to “woody plants or perennial bunch grasses,” it would be helpful to list the range of species that can be combined to optimize hedgerow functions. Note that, especially for the pest biocontrol purpose, flowering species including herbaceous perennial forbs can play a vital complementary role in the





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hedgerow, especially in organic production systems that rely more heavily on biological and ecological processes for crop protection.

**4. Under Additional Criteria for Wildlife Habitat, do not exclude the use of bunch grasses. Rewrite the second paragraph in this Additional Criteria section as follows:**

~~“Hedgerows will not be established using bunch grasses when addressing a wildlife habitat purpose. Hedgerows may include any combination of shrubs, small trees, bunch grasses, and/or other perennial vegetation that meets the habitat needs of the target wildlife species or guild.”~~

While bunch grasses may not provide ideal habitat for all wildlife species, they are considered good habitat for many insects, birds, small mammals, and larger herbivores. Bunch grasses form deep, extensive root systems that support mycorrhizal fungi, confer drought tolerance, and build soil organic carbon, and the top growth of bunch grasses is much less flammable than some invasive exotic grasses and thereby provide some protection against wildfire (Wikipedia entry: [https://en.wikipedia.org/wiki/Tussock\\_grass](https://en.wikipedia.org/wiki/Tussock_grass)). Therefore, instead of eliminating the use of bunch grasses in hedgerows for this Purpose, rely on the third paragraph of Additional Criteria, which requires technical guidance in the selection of hedgerow species to meet the landowner’s wildlife objectives, to ensure that bunch grasses are used only when appropriate.

**5. Support the requirement under Plans and Specifications to integrate the hedgerow planting with a holistic conservation system with corresponding General Criteria and provide flexibility to allow implementation of CPS 422 Hedgerow Planting as a stand-alone practice when appropriate.**

The current Standard includes the following statement under Considerations:  
*“Hedgerows should be planned in combination with other practices to develop holistic conservation systems that enhance landscape aesthetics, reduce soil erosion, improve sediment trapping, improve water quality and provide wildlife habitat.”*

The new Standard moves this language with a slight modification (“Plan hedgerows in combination with other practices ...”) to the Plans and Specifications section, which implies a requirement to combine the hedgerow with other practices. While OFRF strongly supports a whole farm systems approach to conservation and agro-ecosystem development, we are concerned that a firm requirement to integrate hedgerow with other practices may deter farmers from adopting the practice and NRCS field staff from promoting it, thereby reducing the amount of carbon sequestration, wildlife habitat, biological pest control, and other benefits from this practice. Furthermore, there are no



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Criteria that specifically address the integration of CPS 422 Hedgerow with other practices.

We urge NRCS to address these concerns by taking two steps. First, add the following paragraph to General Criteria:

*“When practical and appropriate, implement CPS 422 as one component of a holistic conservation system to address multiple soil, water, and wildlife habitat conservation goals.”*

Second, modify the bullet point regarding holistic systems under Plans and Specifications as follows:

*“Wherever appropriate and practical, plan hedgerows in combination with other practices to develop holistic conservation systems that enhance landscape aesthetics, reduce soil erosion, improve sediment trapping, improve water quality, and provide wildlife habitat.*

### CPS 484 Mulching

Mulching is one of the most widely used and important cultural practices in organic specialty crop production. The practice plays an especially important role in managing weeds without herbicides, and opaque synthetic mulches such as black plastic film and landscape fabric are especially effective in reducing weed competition and weed control labor in high-value crops.

The NOP National List of Allowed Synthetic Substances includes plastic mulches, provided that the materials are removed and disposed of at the end of the season. An increasing number of organic producers and processors are seeking to reduce their use of plastics in production, packaging, and marketing, as exemplified by the 2023 Organic Confluences Conference held by The Organic Center, *Reducing Plastics Along the Entire Organic Supply Chain* (<https://eorganic.info/node/35697>). Rising concerns over “microplastics” in the environment and the lack of soil health benefits from a plastic mulch (versus an organic mulch of plant-based materials) are impelling many organic farmers to move away from plastic film mulches to organic or biodegradable mulching materials.

Organic mulches offer many benefits including soil health, moisture conservation, and beneficial habitat. However, they do not suppress weeds as effectively as plastic film, and their application can entail substantial materials and labor costs. Technical and financial assistance through CPS 484 Mulching can help organic producers make the best use of mulches to meet their soil health, resource stewardship, and production goals. We



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recommend the following modifications to the proposed revision of CPS 484 to maximize conservation benefits from this practice.

**1. Reinstate and expand the soil health purpose for CPS 484 Mulching as follows:**

*“Improve and maintain soil health, organic matter content, and habitat for beneficial soil organisms.”*

The current Standard includes the purpose “Maintain or increase organic matter content” and provides Additional Criteria including the use of suitable plant-based materials to add organic matter, provide food and shelter for soil organisms, and protect the soil surface from raindrop impact and crusting, and requiring  $SCI \geq -0$ . The proposed revision deletes this Purpose and moves the associated criteria (except for SCI) into Considerations.

The soil health benefits of plant-based organic mulches are widely known among both organic and nonorganic specialty crop farmers, and they include all the benefits listed in the Criteria, providing food and habitat for soil organisms, improving soil aggregation, moderating soil temperatures, and conserving soil moisture as well as building SOM. Furthermore, CPS 484 and its three CSP Enhancements are included in the 2024 CSAF Mitigation Activities List under the Soil Health heading, which clearly reflects the capacity of organic mulches to improve soil health and build soil organic carbon.

While the mulching practice alone may not ensure that the entire SCI will be zero or greater, it can and should yield a positive value for the organic matter component of this index.

We strongly urge NRCS to reinstate and expand the Purpose as shown above, and adopt the Additional Criteria language shown here:

*“Additional Criteria to improve and maintain soil health, organic matter content, and habitat for beneficial soil organisms*

*“Use plant-based mulching materials of suitable quantity and quality to add organic matter, provide food and shelter for soil biota, and protect the soil surface from raindrop impact and crusting, while allowing for adequate soil aeration.*

*“An evaluation of the system using the current approved soil conditioning index (SCI) procedure should result in a positive score for the Organic Matter component of the SCI.”*

**2. We thank NRCS for adding the purpose “Reduce plant pest pressure” and we urge NRCS to add the following language to the Additional Criteria:**



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*“When using plastic mulch on beds or grow zones with uncovered alleys, manage alley weeds and protect soil health through the use of organic mulches, living mulches, cover crops, and non-soil-disturbing weed control tactics such as mowing.”*

Many specialty crop farmers find that opaque synthetic film or fabric mulches provide the best and most labor-efficient weed control. Commonly, a 3 – 4 ft wide bed is covered with plastic leaving alleys between beds uncovered and prone to both erosion and weed growth. Spreading straw or other organic mulch or sowing a cover crop or living mulch in alleys with periodic mowing as needed to minimize competition against the production crop can provide sufficient weed suppression while protecting soil health.

Plastic mulched beds with uncovered alleys can degrade soil health, lose water and nutrients to runoff, and, in sloping fields, lead to severe concentrated flow soil erosion from alleys. Keeping alleys “clean” with cultivation or herbicides can aggravate adverse soil health effects, while not managing alley weeds can compromise the intended purpose of mulching to reduce plant pest pressure. Thus, the scenario of plastic mulched beds and bare soil alleys cannot be truly considered a conservation practice and certainly not a climate-smart practice. Some growers and several USDA Organic Research and Extension Initiative (OREI) projects are utilizing living cover, roll-crimped or mowed cover crops, or organic mulch in alleys to co-manage weeds and soil health in specialty crop production on plastic-mulched raised beds. Initial results have been promising with reduced runoff, erosion, and nutrient losses. Therefore, we urge NRCS to add the above language to Additional Criteria for mulching to reduce plant pest pressure.

### **3. Monitor research findings regarding biodegradable film mulches and hydromulches and update the Standard accordingly.**

We appreciate NRCS for adding new language to Considerations regarding the use of biodegradable mulches to reduce the environmental impact of synthetic mulches, and factors to consider when deciding whether to disk-in the mulch or remove it from the field for composting. More research is needed to clarify the fate of biodegradable film mulches in the soil, their short- and long-term impacts on the soil microbial community, and whether they eventually degrade completely or leave microplastic residues that could have adverse environmental impacts.

In addition to the research findings summarized in the new References added to the Standard in the proposed revision, several OREI projects are evaluating both the efficacy and the soil health and biological impacts of biodegradable film mulches and hydromulches. The National Organic Program (NOP) has not yet approved a biodegradable film mulch formulation for use in certified organic production, and its advisory body, the National Organic Standards Board (NOSB) continues to evaluate and monitor new research on existing and new formulations.



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Biodegradable film mulch could be a powerful weed management tool for both organic and nonorganic specialty crop growers provided that formulations can be developed that combine effective weed control with neutral or beneficial soil and environmental impacts during their decomposition after use. OFRF encourages NRCS to keep up to date with research findings on this question, and we look forward to staying in touch and providing new information on this topic as we become aware of it.

## CPS 528 Grazing Management

The NOP requires organic livestock producers to provide their animals and birds with access to the outdoors and pasture, and organic ruminant livestock (beef and dairy cattle, sheep, goats, etc) must derive at least 30% of their dry matter intake from pasture or range during the grazing season (minimum 120 days per year). In addition, the producer must develop a grazing management plan that protects the health of soils, forage, and livestock while protecting surface and groundwater resources, natural areas, and wildlife (USDA, 2023).

The technical and financial assistance available through CPS 528 Grazing Management can play a vital role in supporting organic livestock producers to meet NOP requirements and to realize the conservation and climate mitigation potential of their pasture-based livestock enterprises. Thus, we are especially grateful for the significant improvements in the Standard, beginning with its renaming as “Grazing Management” to reflect a more adaptive and less prescriptive approach. The expanded statement of Purposes and associated Criteria and Considerations provide an excellent roadmap toward ecological grazing management and will help producers and NRCS field staff to realize the potential of CPS 528 and its many CSP enhancements (which are included on the 2024 CSAF list) to design and implement truly climate-smart grazing systems. In addition, we thank NRCS for:

- New language in the fourth and eighth paragraphs of General Criteria that address needs for maintaining sufficient residual vegetation and contingency plans to optimize resilience and prepare for the growing impacts of climate change.
- Expanded Additional Criteria for purposes related to upland and riparian hydrological functions, soil health, prevention of all forms of soil erosion, and management of invasive exotic plant species.

In addition to the recommendations offered by NSAC (provided in large part by Coalition members with expertise in advanced grazing management), we would like to offer the following recommendations to improve the efficacy of the proposed new Grazing Management standard.



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**1. In the opening statement of the General Criteria section, clarify that this standard applies to all livestock and poultry, not just those that are strict herbivores. Revise as follows** (new language in italics, deletions in strikethrough):

“This practice is intended to address specific resource concerns through management of vegetation with ~~herbivores~~ *livestock or poultry.*”

Neither swine nor poultry are strict herbivores, and both can be managed on pasture in ways that optimize conservation and production outcomes. Organic poultry and swine producers face tough challenges, some of which may be addressed through integration into pasture-based systems utilizing the criteria of this Standard.

**2. Add a statement under General Considerations that implementation of CPS 528 can help organic producers meet NOP grazing requirements for ruminant livestock:**

*“Certified organic producers are required to provide ruminant livestock with access to sufficient pasture to meet 30% of their dry matter intake during the grazing season, to manage pastures for soil, forage, and livestock health, and to protect water and other resources. Implementation of CPS 528 Grazing management and associated supporting practices such as CPS 382 Fence, CPS 576 Livestock Shelter, and CPS 614 Watering Facility can help organic producers meet these requirements and optimize the conservation benefits of their livestock operation.”*

**3. For organic livestock farmers, coordinate with NOP to allow a single plan to meet the requirements of CPS 528 for a Grazing Management Plan (GMP) and NOP requirements for a “management plan for pasture” for ruminant livestock (NOP Organic Production and Handling, § 205.240 Pasture practice standard.)**

Developing a viable grazing management plan that meets an organic farmer’s production and conservation goals as well as the requirements of the Plans and Specifications for CPS 528 and the NOP Pasture Practice Standard is a major undertaking, and every effort should be made to avoid duplication of effort and thereby make this Practice more accessible for organic producers.

The NOP Standard § 205.240 states that “the pasture plan may consist of a pasture/rangeland plan developed in cooperation with a Federal, State, or local conservation office” provided that it meets the requirements of the NOP. Many of the elements of the two plans – stocking rate, soil fertility practices, placement of water, fencing and other infrastructure, and resource conservation measures – are similar, which creates an opportunity to minimize paperwork burdens related to planning.





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We strongly encourage NRCS to take full advantage of this opportunity and thereby make the new and improved CPS 528 readily accessible to organic livestock farmers and ranchers. This may be done in part by adding the following statement to the Plans and Specifications section:

*“For USDA certified organic and transitioning-organic livestock producers, the pasture plan developed as part of the Organic System Plan can provide the basis for the Grazing Management Plan.”*

## CPS 657 Wetland Restoration

We appreciate NRCS for proposing considerable improvements to this Standard including clarification that it applies to the abiotic (hydrology and structural) aspects of restoring wetlands. NOP requires organic producers to protect, maintain, and improve the natural resources of their operation, including “soil, water, wetlands, woodland, and wildlife,” and integrating natural areas such as wetlands into the farming operation can mitigate local microclimates and support natural enemies of crop pests. Thus, organic producers whose farm includes areas that were once wetland may seek NRCS assistance to restore them through this Practice.

In closing, we thank NRCS for this opportunity to review proposed standards revisions, and for your hard work in improving and updating these standards.

Sincerely,

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### Literature Cited:

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