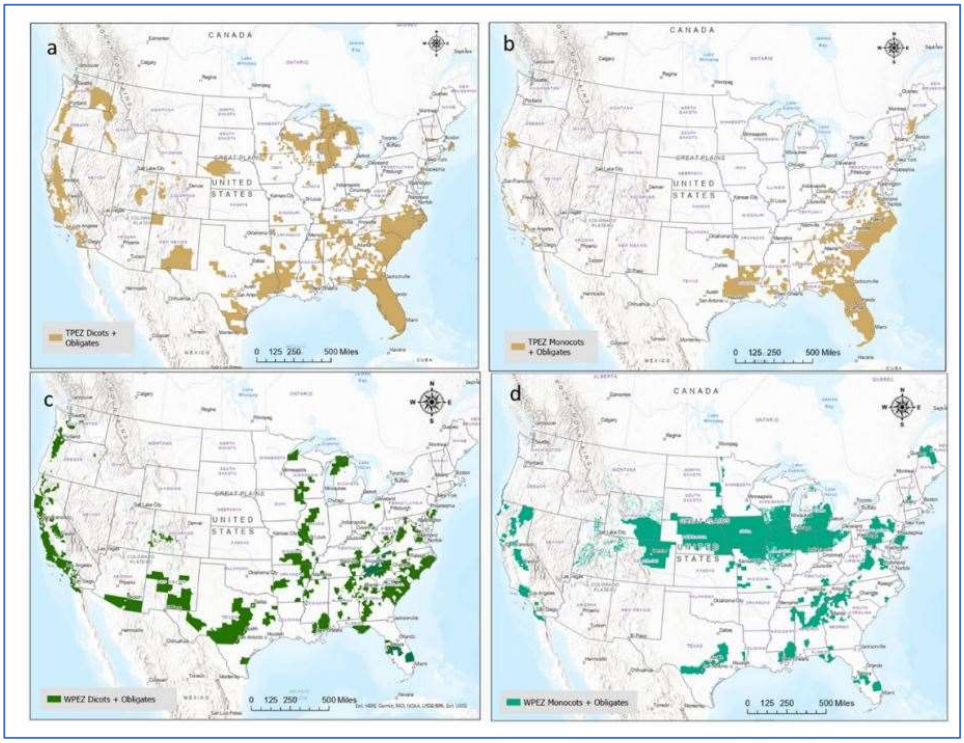
EPA Proposed Herbicide Strategy

- To minimize ecological impacts of herbicides on endangered species and their habitats, EPA is proposing an Herbicide Strategy. The strategy would:
    - Primarily aim to minimize erosion/runoff and spray drift risks of agricultural herbicides.
    - To minimize erosion/runoff risks, EPA would require on herbicide labels that growers gain "efficacy points" by implementing certain conservation practices (no-till, vegetative filter strips, contour terracing, etc.) in their operations.
        - Many herbicide users could need at least 6 points to comply with general label restrictions, while those in four pesticide use limitation areas (PULA) could need 9 or more points.
        - Exemptions are available for fields under site-specific erosion/runoff reduction conservation plans or applications made 1,000 feet from any potential terrestrial or aquatic habitat (the definition of "habitat" is very broad, limiting the application of this exemption.)
        - Growers in areas with subsurface drainage cannot comply by attaining points and must direct all drainage into water retention ponds or buffer zones.



Four pesticide use limitation areas (PULA) under the proposed Herbicide Strategy

- To minimize spray drift risks, growers must implement downwind spray drift buffers up to 500-feet from habitat for aerial applications and up to 200-feet for ground applications.
    - These distances can be reduced by installing windbreaks or using other mitigations, such as hooded sprayers or coarser droplet sizes.

Table 6-9. Potential Mitigation Measures and Efficacy Points

Mitigation Menu Item[1]	Measures that qualify[2]	Efficacy Points
Field Characteristics (one field may rely on multiple field characteristics if they are applicable)		
Application area is to the west of the Interstate-35 and east of U.S. Route 395[3]	Not applicable	1
Application area has predominantly sand, loamy sand, or sandy loam soil without a restrictive layer that impedes the movement of water through soil. See USDA's Web Soil Survey tool to determine soil texture: https://websoilsurvey.nrcs.usda.gov/app/.	Not applicable	1
The application area has a slope of less than 2%	Naturally low slope or flat fields/ Flat laser leveled	1
Application Parameters		
The maximum single application rate (lbs active ingredient/acre/application) allowed on the label for the specific crop is reduced or only a partial area in the acre is treated. Considered on a per application basis. The percent reduction is calculated as the applied lbs active ingredient applied per acre divided by the maximum single application rate in lbs active ingredient per acre allowed on the label for the crop and application equipment. If only a spot or portion of the field is treated, the reduction in the application over the entire field is considered in the calculation provided the field is draining to the same area. Follow all label requirements related to application rate including not making applications at a lower rate than the minimum required on the label to avoid resistance issues and to avoid no control of the weed/pest.	Reduced application rate, partial treatment of the field, banded application, spot treatment, precision agriculture or sprayers	Percent reduction = Applied application rate in lbs a.i./A divided by the maximum application rate allowed on the label for the crop in lbs a.i./A 90% reduction; 9 80% reduction; 8 70% reduction; 7 60% reduction; 6 50% reduction; 5 40% reduction; 4 30% reduction; 3 20% reduction; 2 10% reduction; 1

Mitigation Menu Item[1]	Measures that qualify[2]	Efficacy Points
Soil incorporation within a few hours of application. If soil incorporation is required on the label for the crop where the application is being utilized, these points are not applicable.	Watering-in or via discing before runoff producing rain event	2
In-field Management Mitigation Measures[4]		
Contour farming	Contour farming, contour tillage	2
	Contour buffer strips, contour strip cropping, prairie strip, alley cropping	3
Cover crop/continuous cropping	Cover crop, double cropping, relay cropping	1
Grassed waterway	Grassed waterway	1
In-field vegetative filter strip (not occuring on a contoured field)	Inter-row vegetated strips, strip cropping, alley cropping, strip	3
Irrigation water management	Not applicable	1
Mulch amendment with natural materials	Mulching	3
Residue tillage management	No till, reduced till	2
Terrace farming	Terrace farming, terracing, field terracing	2
Adjacent to the Field[4]		
Riparian area	Riparian forest buffer, riparian herbaceous cover	3
Vegetated ditch	Vegetated ditch	1
30-foot Vegetative filter strips – adjacent to the field	Vegetated filter strip, field border, vegetative barrier	2
Other Mitigation Measures[4]		
Water retention systems	Constructed wetland, irrigation and drainage tailwater recovery, retention pond, sediment basins	2
Mitigation measures from multiple categories (*i.e.*, in-field, adjacent to the field, or water retention systems) are utilized[5]	See options in categories above.	1

[1] Proposed mitigation measure descriptions specific to pesticides were published with the ESA Workplan update:

Efficacy practices/points available under the proposed Herbicide Strategy to attain erosion/runoff compliance