

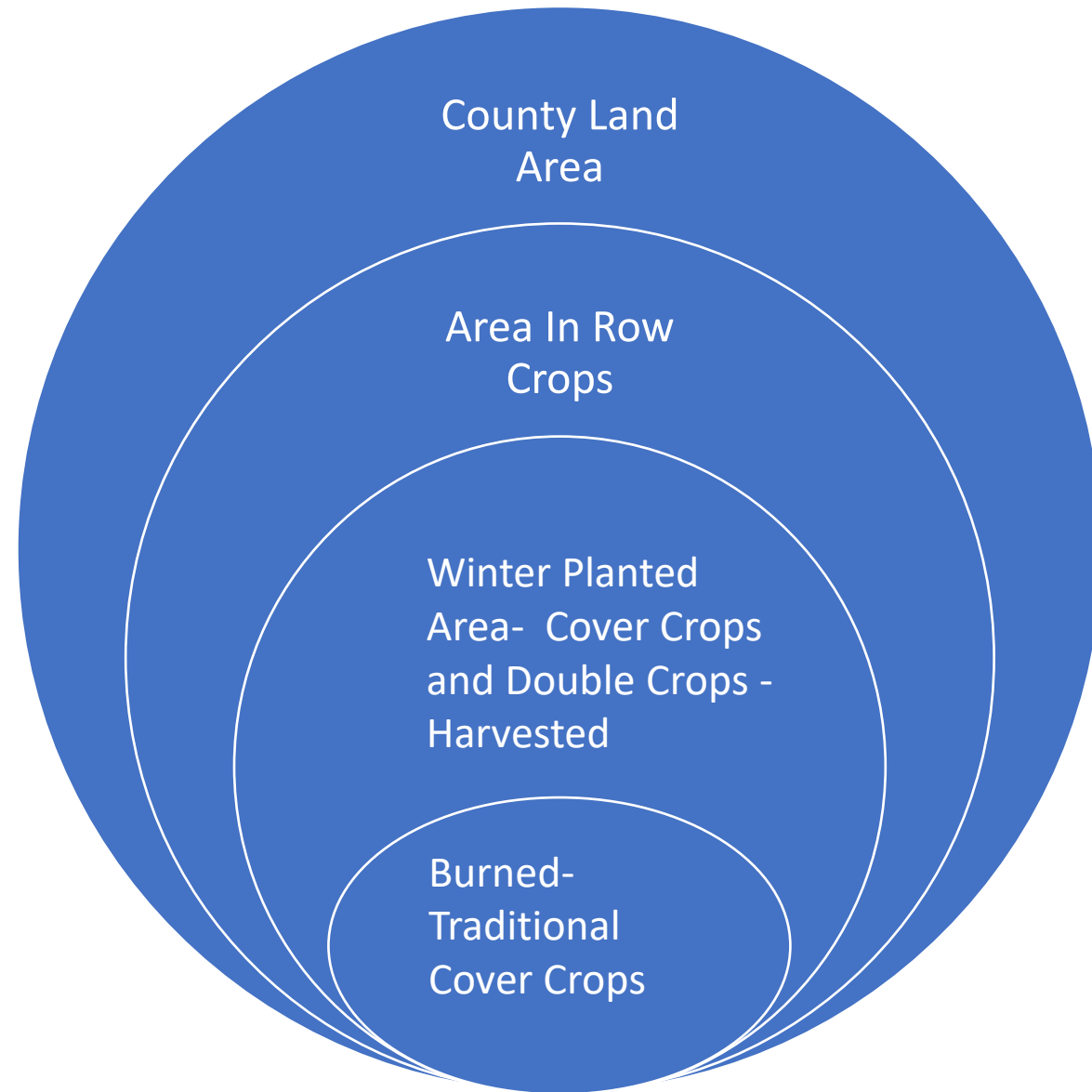
# PADEP Proposal for Commodity Cover Crop Reporting

For AgWG Meeting June 17, 2022

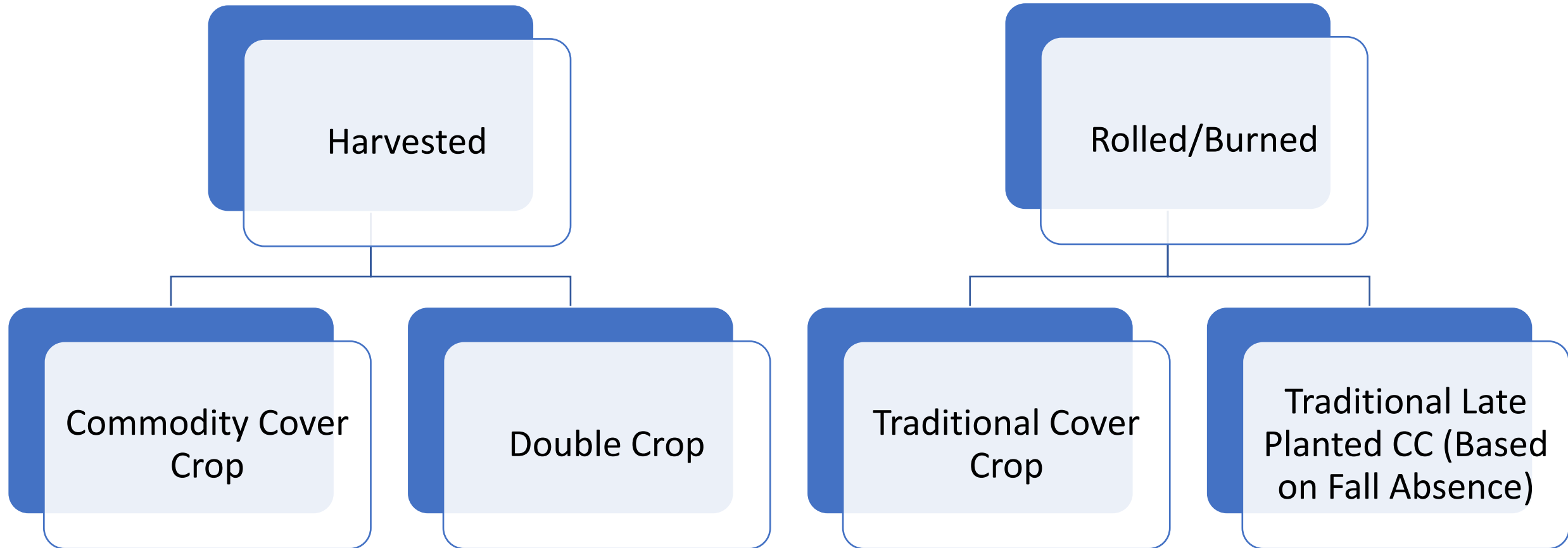
# Transect Survey Method

- Approved for Traditional Cover Crops by AgWG - Nov. 21, 2016
- Routes and Waypoints Developed in Counties with >50k Crop Acres
- Conducted on Two-Year Rotations, Roughly 13-14 Counties Per Year
- Three Member Team - Driver, Observer, Recorder over 2-3 days
- QC Field Inspection Conducted Following Data Collection
- Fall Observations – Planting of Winter Cover and Prior Crop Type
- Spring Observations – Fate of Winter Cover, New Crop, Residue %
- Reported as a Percentage of Observations and Extrapolated to the County Row Crop Acreage Reported in CBWS Current Year Base Conditions Report

# Transect Survey Data Objectives



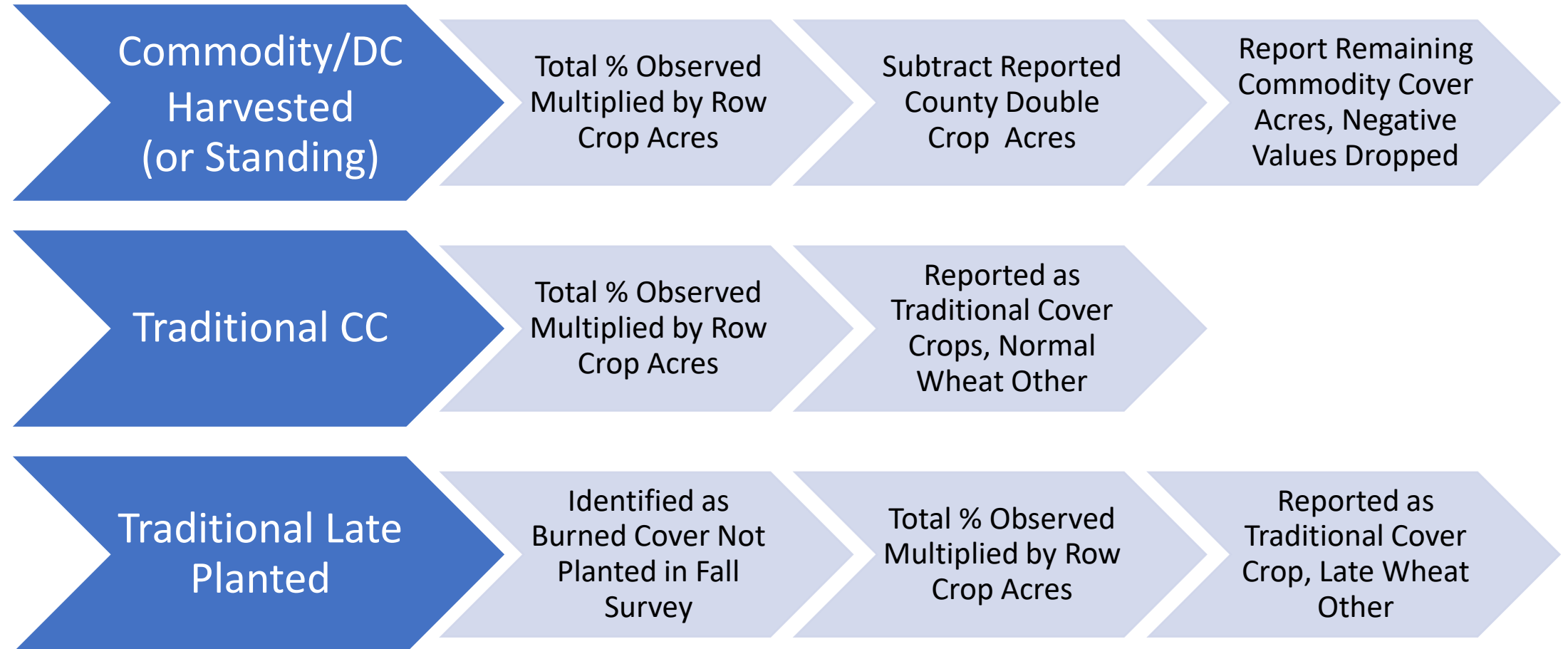
# How Spring Transect Observations Define Cover Crop Types



# Status

- PADEP resented this calculation methodology as a concept at the May 19, 2022, AgWG Meeting
- No comments or concerns received
- Pennsylvania needs a means to collect and report Commodity Cover Crop data to meet WIP targets and document winter-vegetated fields
- Nutrients applied to a growing crop will be constrained and available for plant uptake compared to runoff and leaching from a fallow field
- Climate change is extending the winter growth season and increasing nutrient uptake rates

# Calculation Process to Report Acres



# Cover Crop Calculation Worksheet

County	RC Acres*	Trad CovCrop %	Trad CovCrop AC	CCC Winter Cover %	CCC Winter Cover Ac	Late CC%	Late CC AC	
County 1	87,468	0.038	3324	0.3200	27990	0.0020	174.9	2021 survey
County 2	58,169	0.138	8027	0.2070	12041	0.0090	523.5	2020 survey
County 3	126,263	0.0893	11275	0.0030	379	0.0070	883.8	2019 survey
County 4	36,610	0.238	8713	0.3930	14388	0.0020	73.2	Minimum
County 5	69,290	0.1822	12625	0.0030	208	0.0070	485.0	
County 6	36,167	0.513	18554	0.0480	1736	0.0290	1048.8	
County 7	470	0.0478	22	0.0480	23	0.0020	0.9	
County 8	8,111	0.0478	388	0.0480	389	0.0020	16.2	
County 9	52,829	0.1088	5748	0.0030	158	0.0070	369.8	
County 10	63,185	0.0478	3020	0.0480	3033	0.0020	126.4	

# Reporting Impact

- In Pennsylvania, based on 2021 reported Land Use the Transect Survey identified 206,859 acres of Harvested Winter Cover.
- The 2021 model Base Conditions reported 141,392 acres of Double Crop in Pennsylvania. After calculation, a total of 120,481 acres of Commodity Cover Crop were identified. (Note: the amount of Double Crop exceeded the reported Winter Cover acreage in 18/43 counties)
- The crediting of 120,481 acres of Commodity Cover Crop equates to an Edge of Tide reduction of 160,350 lbs/yr of Nitrogen, or 0.15% of our annual load (104.34 Mlbs/yr)



# Conclusions

- Since 2016 Transect Surveys are an approved data collection/reporting method for Traditional Cover Crops
- We are seeking support in allowing Transect Survey methods to also report Commodity Cover Crops through annual Double Crop acreage removal
- Pennsylvania is working to encourage as much winter season planting as possible, counting acres makes for progress
- We know that there are more than zero acres of Commodity Cover Crop being planted and we need a means to report these acres in order to meet WIP targets
- We'll return next month to address any follow-up questions and ask for a consensus vote to allow Commodity Cover Crop reporting using the Transect Survey and Double Crop correction method presented
- Please contact Ted Tesler, Frank Schneider, or Kate Bresaw (PA AgWG) with your questions, comments, or suggestions