Variables	Accuracy of Best Model	P-Value
Random Classification		
None	47.8 ± 0.472%	-
Decision Tree One-Variable Classification		
AWND	62.4 ± 0.034%	<0.001*
PRCP	62.4 ± 0.006%	<0.001*
TAVG	62.4 ± 0.017%	<0.001*
DURING_A_DROUGHT	62.4 ± 0.006%	<0.001*
WATERSHD	62.4 ± 0.006%	<0.001*
POP_BY_COUNTY	**64.1 ± 0.296%**	**<0.001***
Decision Tree Two-Variable Classification		
DURING_A_DROUGHT, WATERSHD	62.4 ± 0.006%	<0.001*
POP_BY_COUNTY, AWND	62.7 ± 0.674%	<0.001*
Decision Tree Three-Variable Classification		
AWND, PRCP, TAVG	62.4 ± 0.006%	0.002*
DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	64.0 ± 0.509%	<0.001*
POP_BY_COUNTY, AWND, TAVG	62.5 ± 0.396%	0.001*
Decision Tree All-Variable Classification		
AWND, PRCP, TAVG, DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	62.5 ± 0.385%	<0.001*
Random Forest All-Variable Classification		
AWND, PRCP, TAVG, DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	62.3 ± 0.020%	<0.001*

Note: Asterisks (*) indicate significantly higher accuracy than a random classification, and **bold** type indicates the highest-accuracy model.

Variables	Max Depth (max_depth)	Cross Validation Generator (cv)	Quality of Split (criterion)	# of Trees in Forest (n_estimators)
Random Classification				
None	-	-	-	-
Decision Tree One-Variable Classification				
AWND	3	5*	gini*	-
PRCP	1	5*	gini*	-
TAVG	3	5*	gini*	-
DURING_A_DROUGHT	1	5*	gini*	-
WATERSHD	1	5*	gini*	-
POP_BY_COUNTY	13	5*	gini*	-
Decision Tree Two-Variable Classification				
DURING_A_DROUGHT, WATERSHD	1	5*	gini*	-
POP_BY_COUNTY, AWND	7	5*	gini*	-
Decision Tree Three-Variable Classification				
AWND, PRCP, TAVG	1	5*	gini*	-
DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	10	5*	gini*	-
POP_BY_COUNTY, AWND, TAVG	5	5*	gini*	-
Decision Tree All-Variable Classification				
AWND, PRCP, TAVG, DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	6	5*	gini*	-
Random Forest All-Variable Classification				
AWND, PRCP, TAVG, DURING_A_DROUGHT, WATERSHD, POP_BY_COUNTY	6	5*	gini*	100*

Note: Asterisks (*) indicates it is a default parameter value.