

Dams in McKinney Current Rules and Potential Changes

July 21, 2026

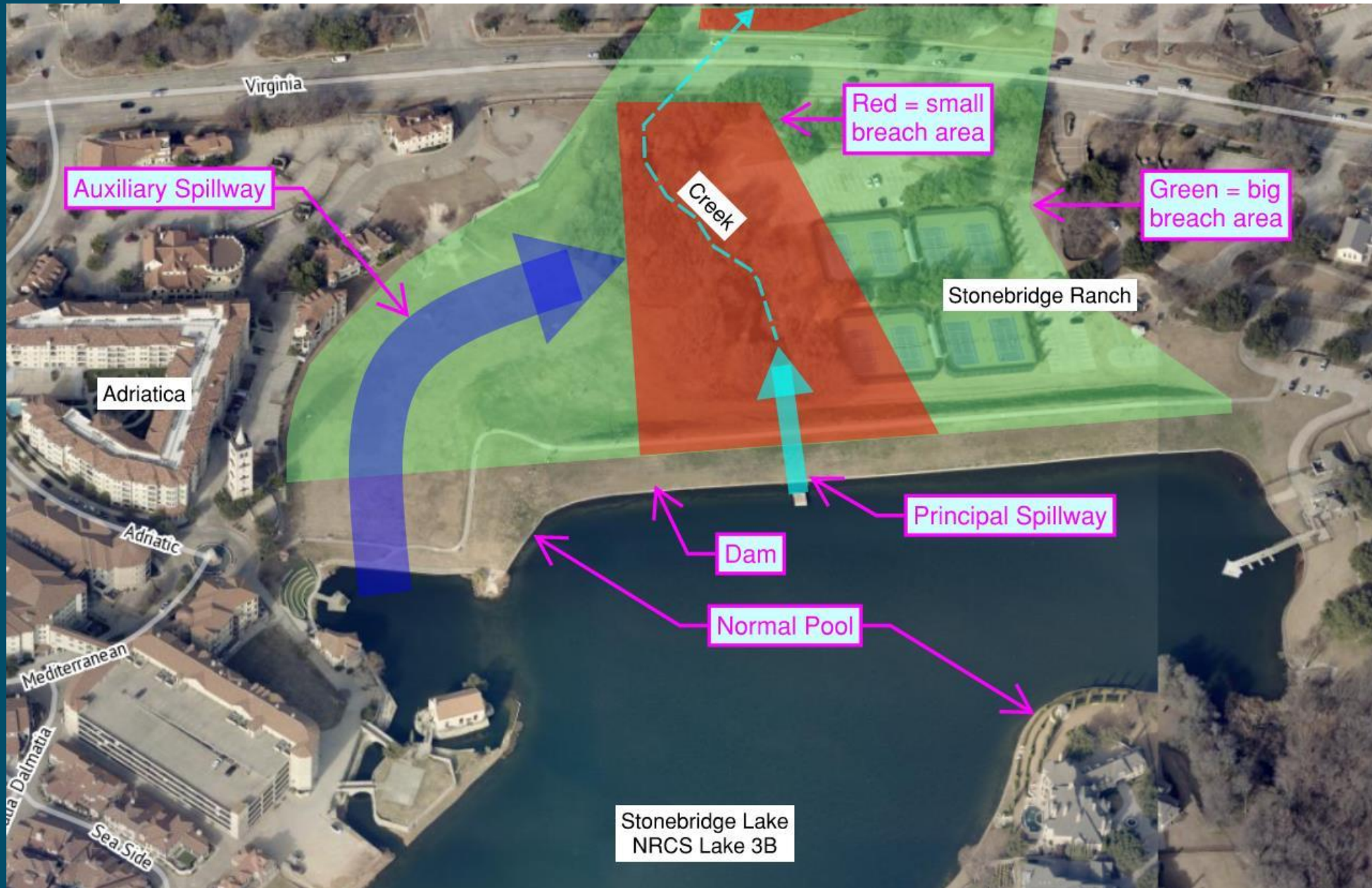
Why are we here?

- Concern from the development community over McKinney rules for dams.
- Are McKinney rules different from those in other cities?
- Why is development not allowed downstream of a dam?
- Discuss how McKinney requirements compare to other cities.
- Seek consensus on potential rule changes.

Things to Keep in Mind

- The likelihood of failure is low for most dams, but the consequences of failure can vary widely based on downstream development.
- Hazard classification can change over time if development is allowed in the big breach area.
- Breach areas extend quite far downstream. Downstream property owners can potentially be impacted by upstream dam conditions.

Terminology



Dam Hazard Classification

Same breach scenario.
Different downstream impact.



- - - Estimated breach limits

Hazard Classification is based on potential downstream impact if the dam were to fail.

Comparison with Other Cities

Category	McKinney (existing)	Plano	Frisco	Prosper	Celina
Does City require dam rehab?	Yes	Yes	Yes	Yes	Yes
When does City require rehab?	When property develops	Land use change from agricultural to other	Land use change from agricultural to other	Not specified	Land use change from agricultural to other
Which hazard class requires rehab?	All	All	All	Not specified	Not specified
Are homes prohibited in big breach area?	Yes	Yes	Yes	Not specified	Not specified
NRCS Dams	13	0	0	3	5

Recommended Changes

Existing	Proposed
Low hazard dams treated the same as significant and high hazard dams	No upgrades required for most low hazard dams
- Residential development prohibited in NRCS dam breach areas - Commercial development allowed in compliant NRCS dam breach areas	- Overnight lodging prohibited in small breach areas for compliant dams - Overnight lodging prohibited in big breach areas for noncompliant dams
Breach scenario not specified	Breach scenario based on dam condition: - Compliant dams = small breach area - Noncompliant dams = big breach area

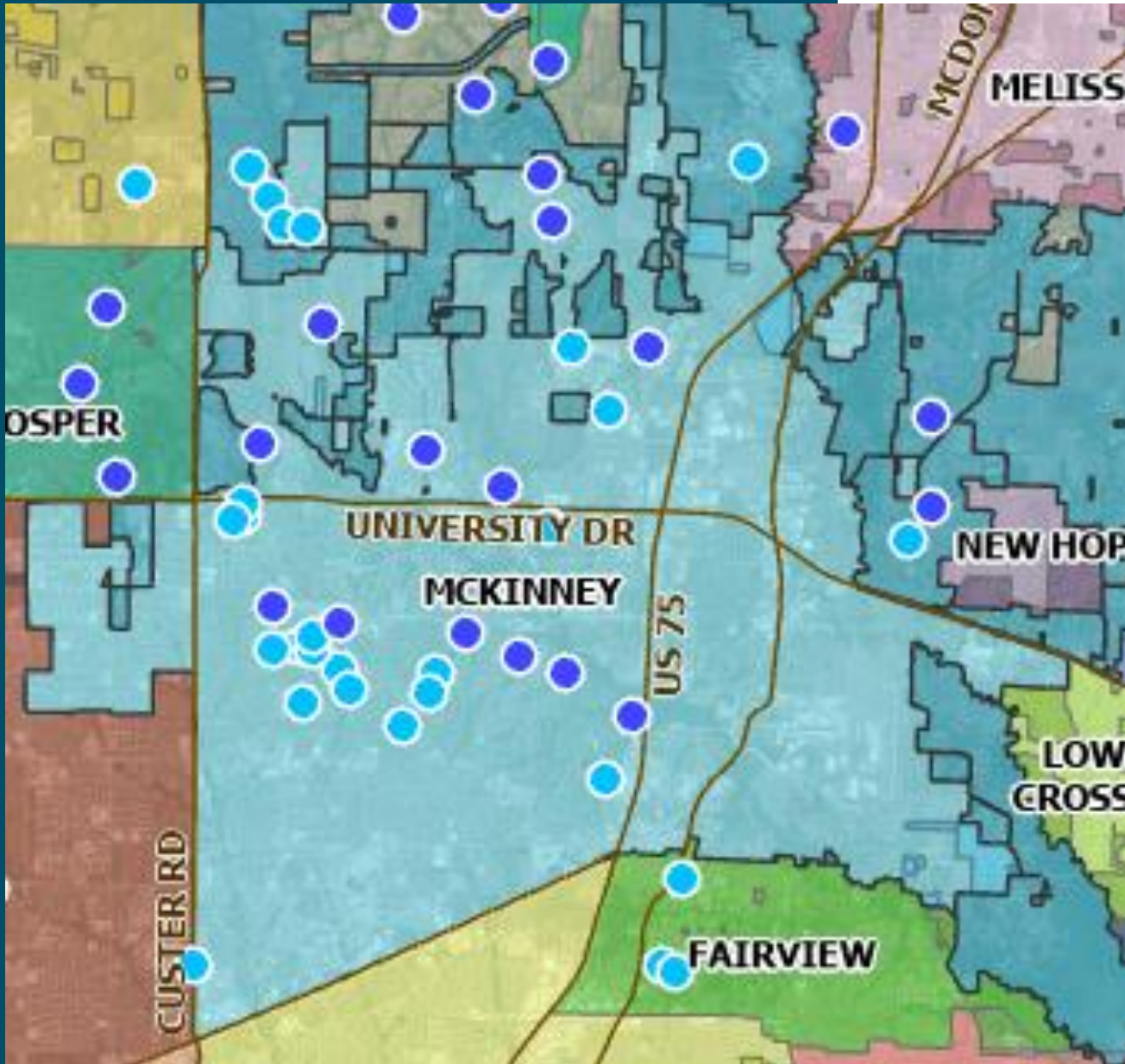
New Comparison with Other Cities

Category	McKinney (proposed)	Plano	Frisco	Prosper	Celina
Does City require dam rehab?	Yes	Yes	Yes	Yes	Yes
When does City require rehab?	When property develops	Land use change from agricultural to other	Land use change from agricultural to other	Not specified	Land use change from agricultural to other
Which hazard class requires rehab?	<i>All but Most Low Hazard dams</i>	All	All	Not specified	Not specified
Are homes prohibited in big breach area?	<i>Yes (noncompliant)</i> <i>No (compliant)</i>	Yes	Yes	Not specified	Not specified
NRCS Dams	13	0	0	3	5

Questions?



**Small Breach Area
(sunny-day)
vs.
Big Breach Area
(full)**



National Inventory of Dams

National Inventory of Dams in Collin County

McKinney

Total Dams: 39
 NRCS in City Limits: 13
 Non-NRCS in City Limits: 19
 NRCS in ETJ: 4
 Non-NRCS in ETJ: 3

Unincorporated Non-ETJ Collin County

Total Dams: 25
 NRCS: 24
 Non-NRCS: 1

Anna

Total Dams: 18
 NRCS in City Limits: 3
 Non-NRCS in City Limits: 2
 NRCS in ETJ: 13
 Non-NRCS in ETJ: 0

Celina

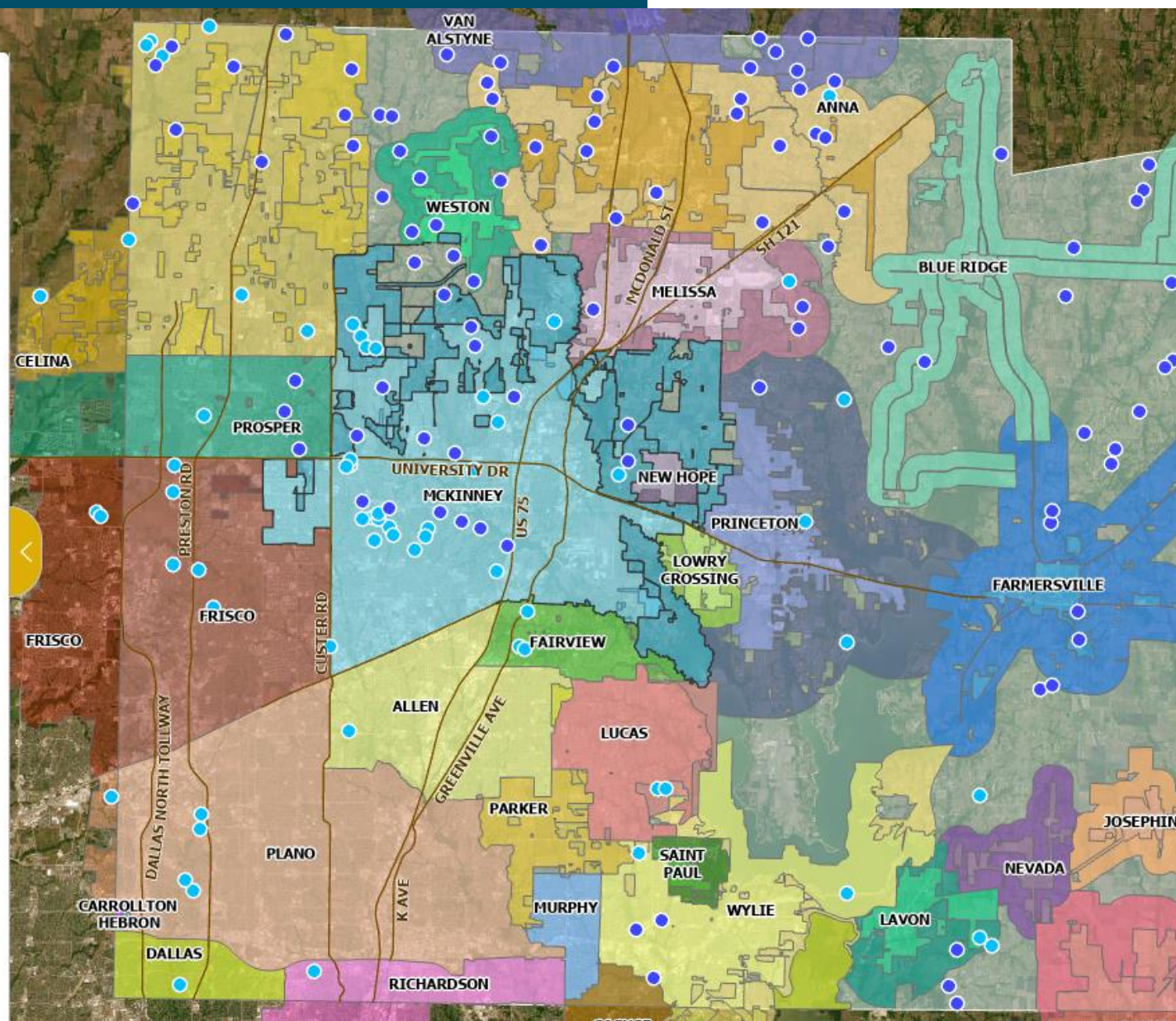
Total Dams: 18
 NRCS in City Limits: 5
 Non-NRCS in City Limits: 8
 NRCS in ETJ: 5
 Non-NRCS in ETJ: 0

Van Alstyne

Total Dams: 9
 NRCS in City Limits: 0
 Non-NRCS in City Limits: 0
 NRCS in ETJ: 9
 Non-NRCS in ETJ: 0

Frisco

Total Dams: 7



National Inventory of Dams

Low Hazard



Jordan Dam
Aster Park

What is a dam?

