

Erosion and Sediment Control for Large Common Plan Sites in Texas

TXR150000 compliance, sediment basin design at the 10-acre trigger, and field implementation

60-minute professional development session | September 18, 2026

Two thresholds people confuse constantly

5 acres

Permit category

Disturbing 5 or more acres — or less within a larger common plan totaling 5+ acres — is a large construction activity requiring an NOI and SWP3.

10 acres

Design trigger

A common drainage location serving 10 or more acres disturbed at one time triggers sediment basin analysis and sizing.

Total project acreage alone answers neither question. Both tests are applied to what is disturbed at one time.

AGENDA

Session roadmap

Section	Time	Focus
1. Regulatory framework	8 min	TXR150000, applicability, common plan, thresholds
2. Authorization	8 min	Operators, NOI, site notices, MS4 notification
3. SWP3 requirements	8 min	Narratives, maps, receiving waters, phasing
4. Control design	15 min	Erosion prevention, basins, perimeter, stabilization
5. Field compliance	10 min	Inspections, rainfall triggers, corrective action
6. Closeout and local rules	6 min	Final stabilization, NOT, retention, overlays
Questions	5 min	Project-specific discussion

01

Regulatory framework

What the permit covers, who it covers, and what a common plan actually is

TXR150000 is the statewide baseline permit

- TXR150000 is the TCEQ Construction General Permit authorizing stormwater discharges from regulated construction activity statewide.
- The current permit is scheduled to expire March 5, 2028 — always confirm the operative version and any amendments before design.
- Coverage is obtained by the operator, not by the property. Multiple operators on one site each have obligations.
- Local governments and MS4 operators may impose additional or more stringent requirements. The CGP is the floor.
- Other authorizations may run in parallel: Section 404/401, Edwards Aquifer Chapter 213 plans, local grading permits.

Large construction activity: the 5-acre test

Large construction

Disturbs 5 or more acres, or disturbs less than 5 acres but is part of a larger common plan that will ultimately disturb 5 or more acres.

Small construction

Disturbs 1 to less than 5 acres, including a smaller part of a common plan totaling 1 to less than 5 acres.

Why it matters

Large activity requires NOI submittal, a Large Construction Site Notice, an SWP3 meeting the full Section III requirements, and a Notice of Termination.

Common error

Phasing a 30-acre subdivision into 4-acre releases does not avoid large-construction status. The common plan governs.

What establishes a common plan of development

- A common plan can be carried out in separate phases or stages, by different contractors, and over multiple years.
- Evidence includes plats, construction plans, permits, contracts, marketing materials, zoning requests, and public notices.
- Interior lot development within a platted subdivision is generally part of the original common plan.
- Separately owned parcels can still be one common plan when the development is advertised or permitted as a single project.
- Document the acreage accounting in the SWP3 — reviewers and inspectors will ask how totals were derived.

Example: phasing and lot-by-lot builders

LARGE CONSTRUCTION — 35 acres total

A. Subdivision built in phases over 6 years

Phase 1 2026 12 ac disturbed	Phase 2 2028 9 ac disturbed	Phase 3 2031 14 ac disturbed
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One recorded plat • one master plan • one common plan (35 ac)

STILL THE COMMON PLAN

B. Individual builders on platted lots

Builders A-D, 0.4 ac each, separate contracts

A	B	B	D	C	D
C	A	B	D	A	A

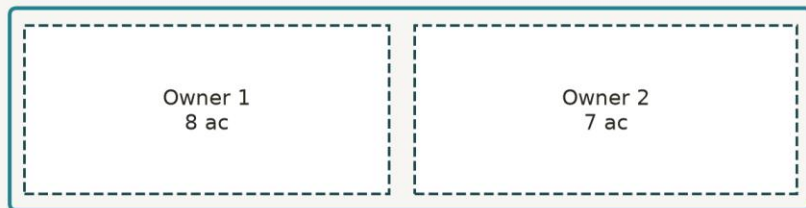
Interior lot development inside the platted subdivision
remains part of the original common plan

Neither splitting the schedule nor splitting the lots resets the acreage total. Both examples are large construction activity.

Example: separate owners, one project

ONE COMMON PLAN — 15 acres

C. Two owners, one marketed development



*Shared entrance, joint zoning case, one site plan,
advertised as "Mill Creek Commons"*

SEPARATE PROJECTS

D. Genuinely separate projects

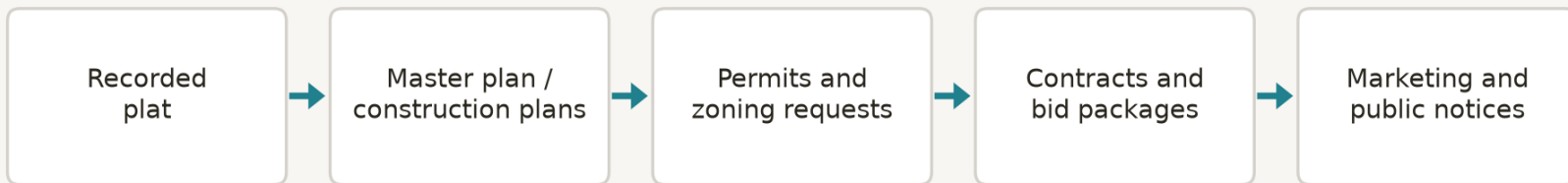


*No shared plat, plan, permit, contract, or marketing —
no common-plan connection to document*

Ownership boundaries do not decide the question. Shared plans, permits, entrances, and marketing do.

Evidence reviewers rely on

What reviewers and inspectors look at

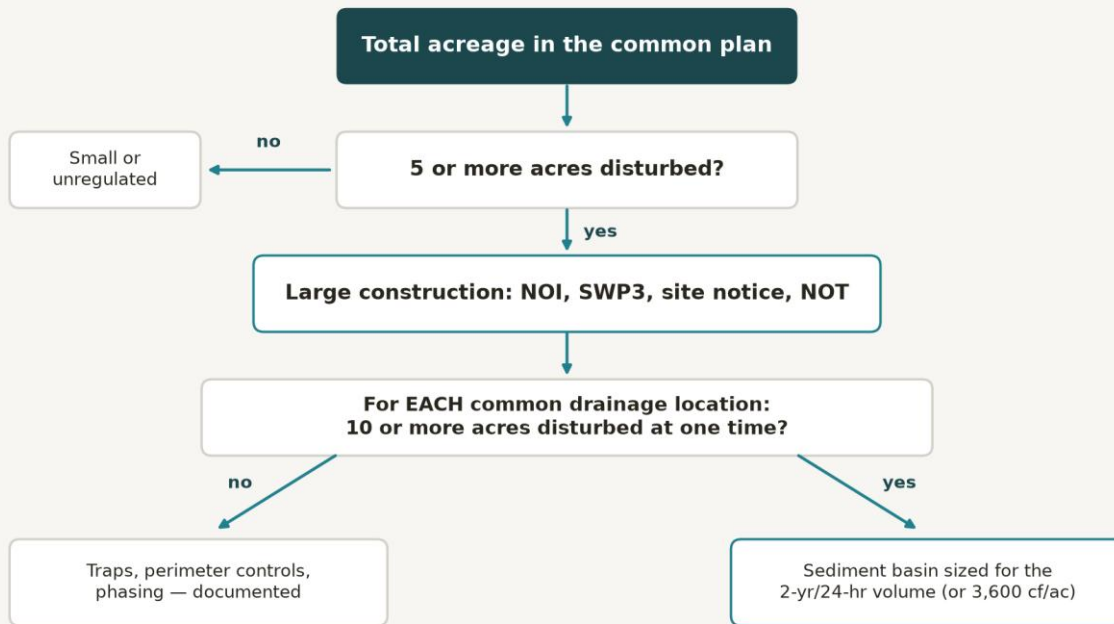


Any one of these can establish a common plan — reviewers read the owner's own documents

Advise clients early: the marketing brochure and the zoning application are discoverable, and they define the project boundary whether or not the SWP3 agrees.

THRESHOLDS

Applying both thresholds in sequence



02

Authorization and notices

Operator roles, NOI, site notices, MS4 delivery, and termination

Primary versus secondary operator obligations

Obligation	Primary operator	Secondary operator
Control basis	Plans/specs or day-to-day operations	Day-to-day control only, limited scope
SWP3	Develop and implement for its areas	Implement applicable portions
NOI	Required for large construction	Not required if primary has coverage
Site notice	Form 20961 posted at site	Form 20962 posted at site
MS4 delivery	Signed NOI to MS4 before construction	Notice to MS4 at least 2 days prior
Termination	Submit NOT when conditions met	Remove notice when work complete

AUTHORIZATION

Authorization sequence before earth is disturbed

- 1 Confirm applicability and total common plan acreage
- 2 Identify receiving water, MS4, and overlays
- 3 Prepare SWP3 and phased site maps
- 4 Submit the signed NOI and fee electronically through STEERS
- 5 Post site notice and deliver NOI to the MS4
- 6 Install perimeter and entrance controls, then begin

What STEERS is, and what goes through it

STEERS = State of Texas Environmental Electronic Reporting System — TCEQ's online portal for permit and report filings

What you file there

Notice of Intent (NOI) and fee, Notice of Change (NOC), Notice of Termination (NOT), and the Delegation of Signatory form for primary operators.

Account first, filing second

STEERS needs an account and signed participation agreement before you can file, so set it up during due diligence — not the week you mobilize.

Electronic is the default

File electronically unless you qualify for an electronic reporting waiver; for paper submittal, contact the TCEQ Stormwater Permits Team.

Why it matters to the schedule

Provisional coverage begins immediately on a complete STEERS NOI, but seven days after a paper NOI is postmarked.

Portal: <https://www3.tceq.texas.gov/steers/>

Receiving water screening, in order

1 Name the receiving water and its classified segment (Segment Viewer)

2 Check impairment status in the latest approved Integrated Report

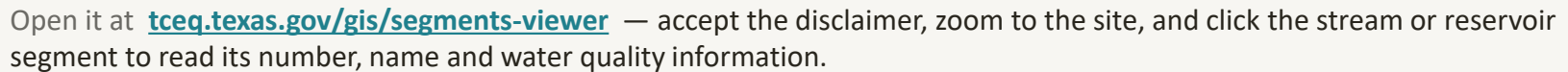
3 Identify the pollutant of concern for any Category 4 or 5 listing

4 Apply any TMDL or implementation plan conditions in the SWP3

5 Confirm Edwards Aquifer zone status for the site

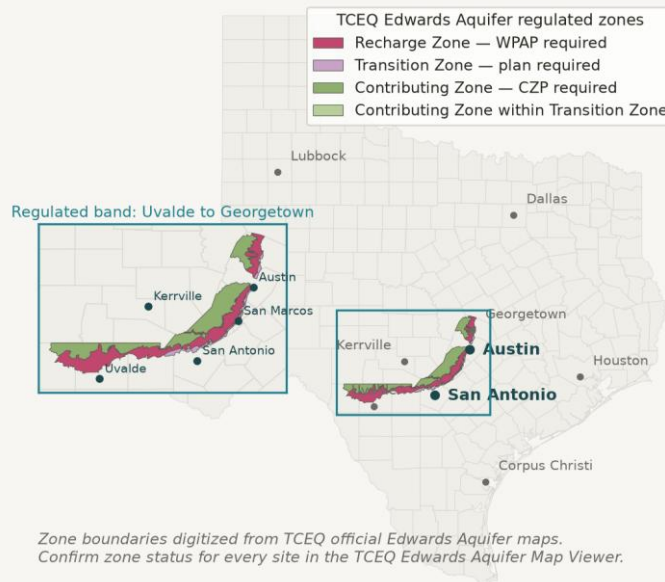
6 Confirm the receiving MS4 and its submittal instructions

Step 1 tool: TCEQ Segment Viewer



Source: [TCEQ Segments Viewer](#), [Map viewer](#)

Step 5 tool: Edwards Aquifer zones



Confirm every site in the [TCEQ Edwards Aquifer Map Viewer](#) — zone lines do not follow property lines, and a single tract can straddle two zones.

Source: [TCEQ Edwards Aquifer Map Viewer](#), [TCEQ Edwards Aquifer Program](#)

Edwards Aquifer projects need earlier approvals

- Regulated activity in the recharge, transition, or contributing zones requires TCEQ review and approval of Chapter 213 plans before construction.
- A Water Pollution Abatement Plan must be approved before construction begins in the recharge zone.
- A Contributing Zone Plan applies to regulated activity in the contributing zone.
- Temporary stormwater controls are submitted on the Temporary Stormwater Section, Form TCEQ-0602.
- Use the Edwards Aquifer Map Viewer, technical guidance RG-348, and the applicable TCEQ regional office contact.
- Build review duration into the project schedule — this is commonly the longest-lead approval.

How long Edwards Aquifer approval takes

Stage	Duration	Basis
Application preparation	Weeks to months	Final plans required; incomplete or draft plans get returned
Administrative review	Up to 30 days	30 TAC 213.4(e); usually scheduled about two weeks after submittal
Technical review	90 calendar days	30 TAC 213.4(e), once administratively complete
Responding to review comments	Project specific	Each response restarts review effort on the affected items

Plan on roughly four to six months from submittal to approval on a typical site — and no regulated construction may begin until the plan is approved.

03

SWP3 requirements

A living, site-specific document — not a boilerplate exhibit

Required SWP3 narrative content

Project description

- Nature and sequence of construction
- Total and disturbed acreage
- Construction support activities, including offsite areas
- Soils and receiving waters
- Potential pollutants and pollutant-generating operations

Controls and administration

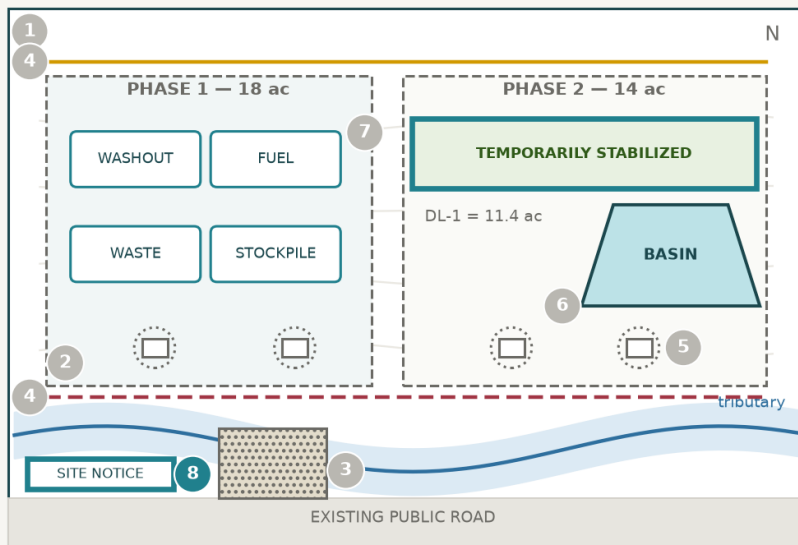
- Erosion, sediment, and stabilization practices
- Phasing and limits of disturbance
- Inspection frequency and documentation
- Maintenance and corrective action process
- Operator responsibilities and signatory delegation

Site maps: what must be shown

- Pre-grading and post-grading drainage patterns, with common drainage locations identified.
- Limits and phases of disturbance, and areas not to be disturbed.
- Locations of erosion controls, sediment controls, buffers, and stabilization areas.
- Surface waters, wetlands, receiving waters, and MS4 discharge points.
- Construction entrances, vehicle wash areas, and haul routes.
- Concrete, paint, and stucco washout areas.
- Waste storage, fueling, stockpiles, and dewatering discharge points.

Building a site map, feature by feature

Click to add each layer



SWP3 map build sequence

- 1 Boundary, acreage, existing drainage, receiving water
- 2 Limits of disturbance and construction phases
- 3 Stabilized exit, haul route, track-out control
- 4 Perimeter silt fence and run-on diversion
- 5 Storm drain inlets with inlet protection
- 6 Sediment basin at the 10+ acre drainage location
- 7 Washout, fueling, waste and stockpile areas
- 8 Stabilization areas and posted site notice

Separate maps for each phase

Phase 1

Preconstruction and perimeter control installation, entrances, tree and buffer protection.

Phase 2

Mass grading, basins and traps in service, diversions and slope breaks.

Phase 3

Utilities and drainage infrastructure, inlet protection, dewatering.

Phase 4

Paving and vertical construction, washout areas, material and waste management.

Phase 5

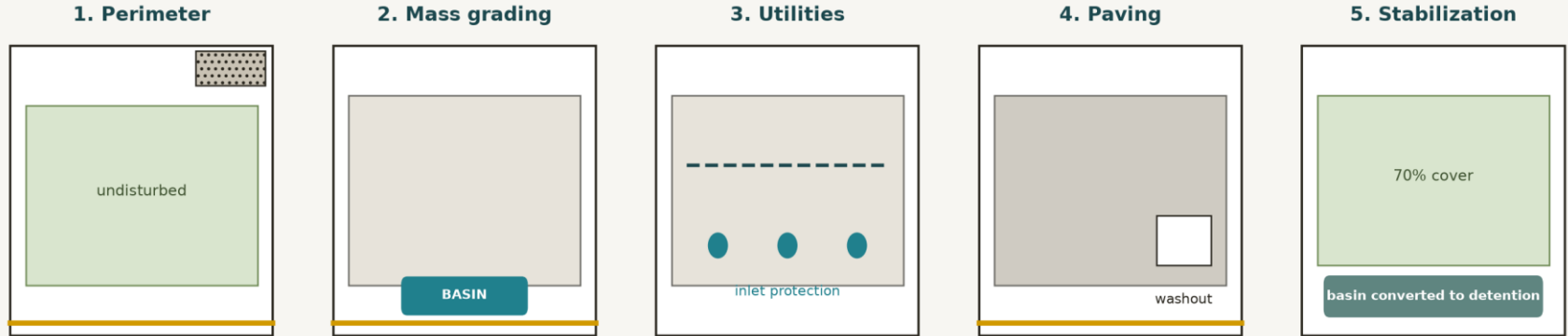
Temporary and final stabilization, basin conversion, control removal.

Why phase it

A composite sheet cannot show a basin that is later converted to detention.

Where do these five phases come from? TXR150000 and TCEQ's SWP3 template require the intended sequence of major soil-disturbing activities, with controls shown for each stage. The five named phases above are industry practice (iSWM, TxDOT), not a TCEQ-defined list.

Phased maps: controls change over time



One composite sheet cannot show a basin that serves mass grading and is later converted to permanent detention. Phased sheets can — and they survive inspection.

04

Control design

Prevent erosion first, capture sediment second, manage other pollutants always

Design hierarchy: prevention outperforms treatment

1. Prevent erosion

Phase clearing and grading, minimize exposed soil and steep-slope disturbance, preserve vegetation, buffers, and topsoil, divert clean run-on, break long slopes, stabilize channels and outlets.

2. Capture sediment

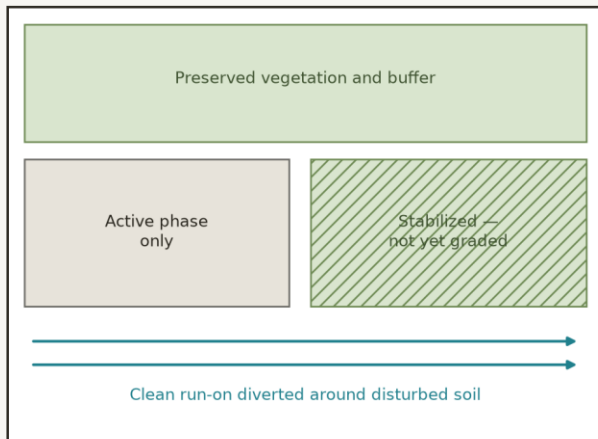
Sedimentation basins and traps, downslope perimeter controls, inlet protection, check structures, stabilized exits, stockpile controls, distributed filtration, surface-withdrawal outlets.

3. Other pollutants

Concrete and stucco washout, fueling and maintenance, waste containers and portable toilets, bagged and bulk materials, fertilizers, spill prevention and response, dewatering.

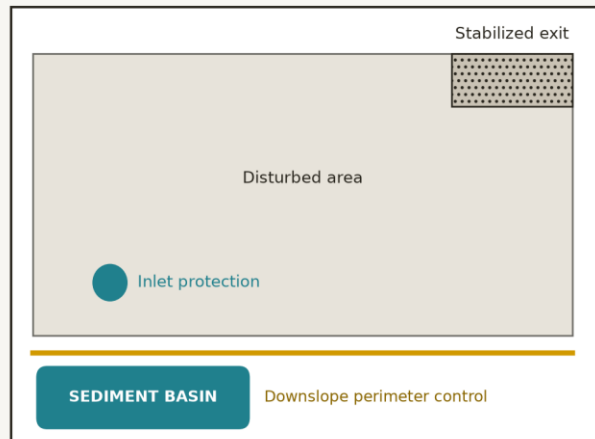
Prevention and capture on the same site

Prevent erosion first



Less exposed soil, shorter slopes, fewer controls to maintain

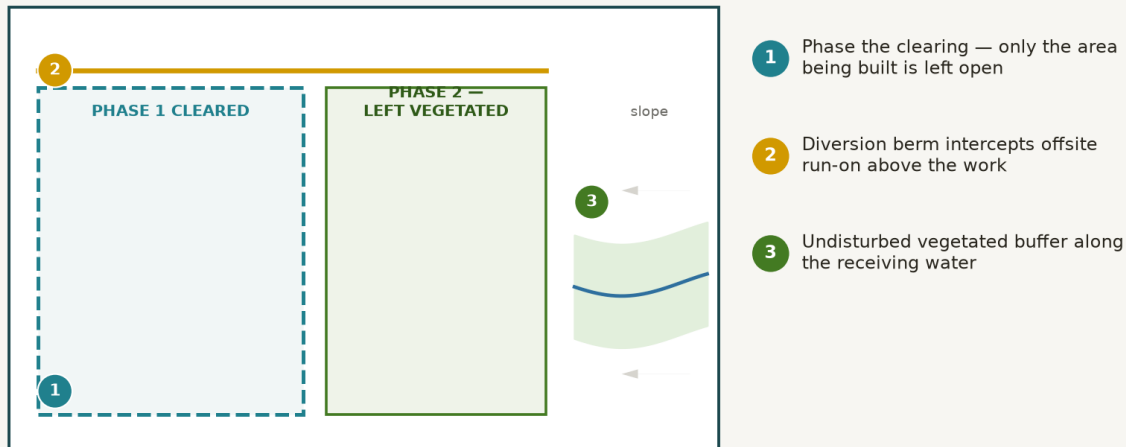
Then capture sediment



Controls treat what prevention could not avoid — never the other way around

Tier 1 in practice: prevent erosion

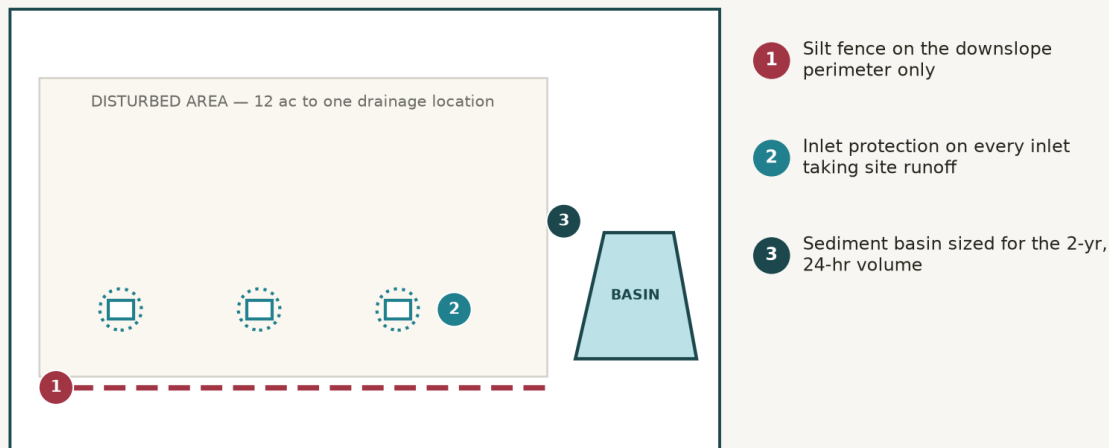
Tier 1 — Prevent erosion: three examples on one site



Three examples on one site: phased clearing so only the active area is open, a diversion berm intercepting offsite run-on above the work, and an undisturbed vegetated buffer along the receiving water.

Tier 2 in practice: capture sediment

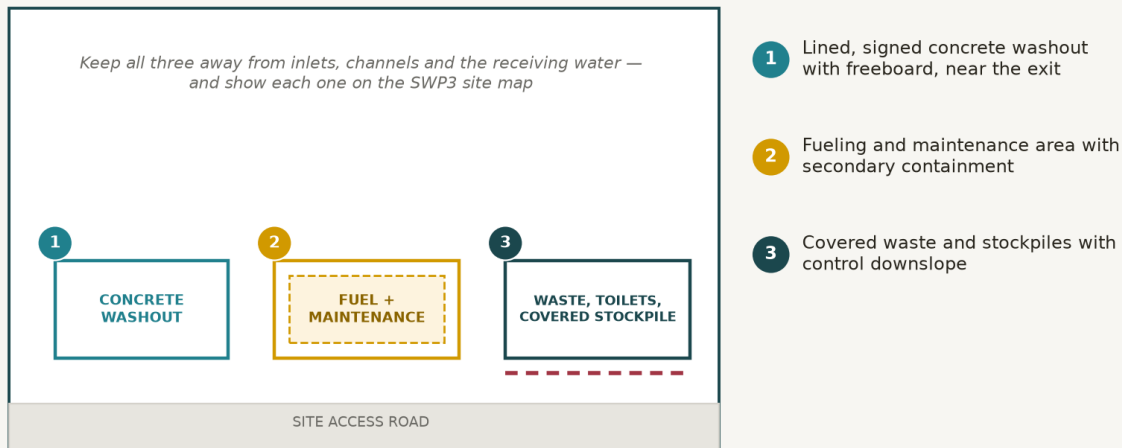
Tier 2 — Capture sediment: three examples on one site



Three examples on the same site: silt fence on the downslope perimeter only, inlet protection on every inlet receiving site runoff, and a sediment basin sized for the 2-year, 24-hour volume at the drainage location over 10 acres.

Tier 3 in practice: other pollutants

Tier 3 — Manage other pollutants: three examples on one site



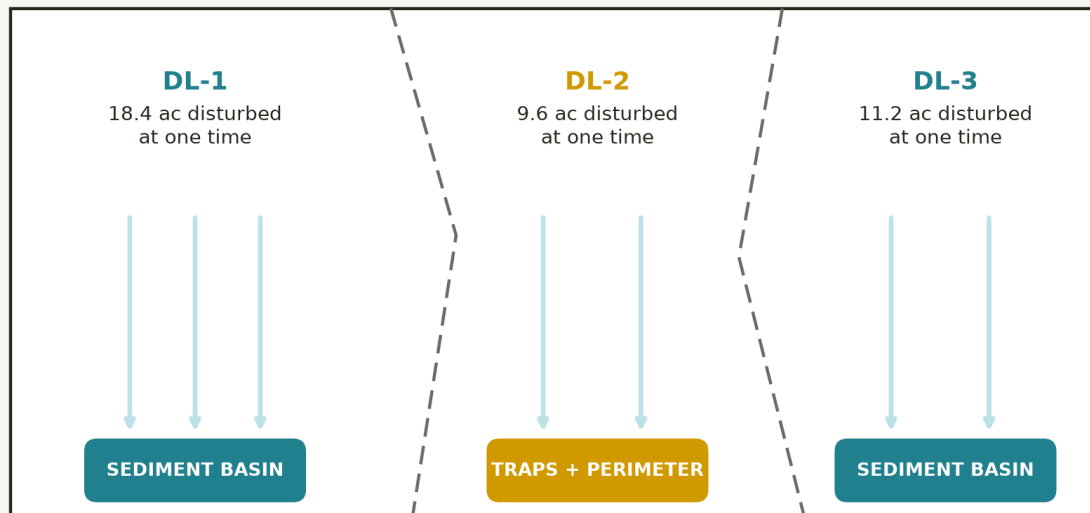
Three examples near the site access road: a lined and signed concrete washout with freeboard, a fueling and maintenance area with secondary containment, and covered waste and stockpiles with perimeter control downslope.

The 10-acre sediment control requirement, read closely

- Evaluate each common drainage location separately — not the site as a whole.
- Determine the acreage disturbed at one time draining to that location.
- Where 10 or more disturbed acres drain to a common location, provide a sediment basin or similar impoundment where feasible.
- Size storage for the calculated runoff volume from the 2-year, 24-hour storm from each disturbed acre drained.
- Where rainfall data are unavailable or the calculation cannot be performed, provide 3,600 cubic feet per disturbed acre drained.
- Offsite, undisturbed, or permanently stabilized runoff may generally be excluded only if it bypasses both the disturbed area and the basin.

Divides, not property lines

Drainage divides, not property lines, define the 10-acre test



39.2 acres disturbed site-wide — but each common drainage location is tested separately

Fallback storage volumes at 3,600 cf per acre

Disturbed acres draining to location	Fallback storage (cubic feet)	Approximate acre-feet
10	36,000	0.83
12	43,200	0.99
15	54,000	1.24
20	72,000	1.65
30	108,000	2.48

These are fallback values. The preferred approach is a project-specific 2-year, 24-hour runoff calculation, which on pervious clay sites often yields less volume — and on nearly impervious conditions can yield more.

WORKED EXAMPLE

Worked example: 42-acre subdivision, three outfalls

Common drainage location	Acres disturbed at one time	Basin required?	Required storage
DL-1, north outfall	18.4	Yes	2-yr/24-hr volume, or 66,240 cf fallback
DL-2, east swale	9.6	No basin trigger	Traps plus perimeter controls, documented
DL-3, south outfall	11.2	Yes	2-yr/24-hr volume, or 40,320 cf fallback

- Total disturbance is 39.2 acres, but no single number drives the design — each location is tested independently.
- DL-2 sits just under the trigger, so phasing must be controlled and documented, or the basin requirement attaches.
- If DL-1 cannot accommodate a basin, record the engineering basis and provide equivalent controls.

When a basin is infeasible, document and substitute

Document the basis

Record the specific constraint — right of way, utilities, karst, rock, slope, offsite grade, sequencing — with the engineer of record identified.

Reduce the load

Phase disturbance so less than 10 acres drains to the location at one time, and stabilize completed areas aggressively.

Distribute the capture

Multiple smaller traps, diversions to separate locations, ditch check sequences, and distributed filtration in place of one impoundment.

Do not assume ponds work

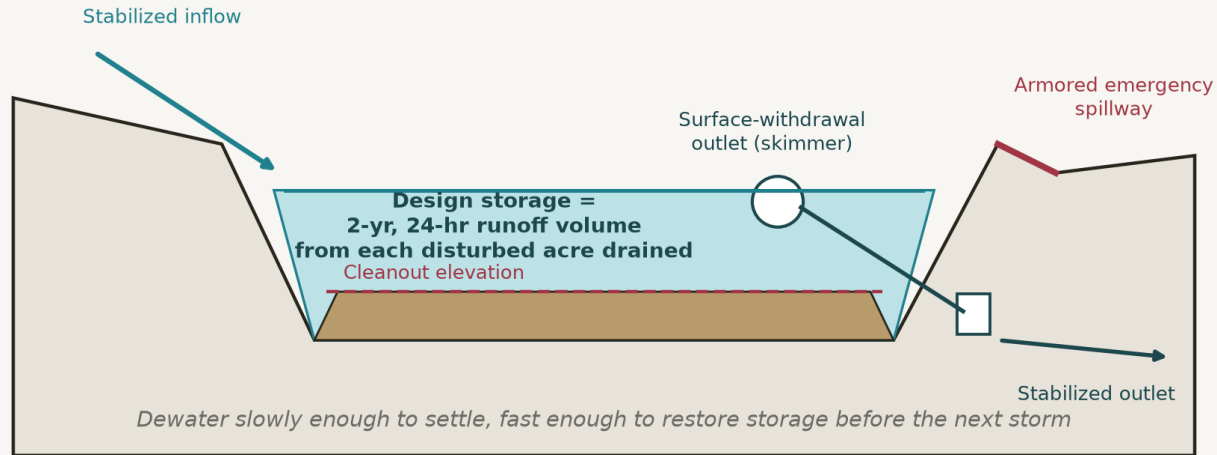
Existing detention or retention ponds are not automatically adequate sediment controls. Evaluate storage, outlet, and sediment access.

Basin design details that fail in the field

- Outlet type: surface withdrawal (skimmer or floating outlet) draws cleaner water than a perforated riser drawing from the bottom.
- Dewatering time: too fast and settling is incomplete; too slow and there is no storage for the next storm.
- Emergency spillway: armored, stabilized, and sized for overtopping without embankment failure.
- Sediment storage and access: mark a cleanout elevation and provide equipment access before the basin is needed.
- Inflow protection: stabilize entry points so the basin does not scour its own inlet channel.
- Conversion plan: show how the temporary basin becomes permanent detention, including sediment removal and final grading.

Sediment basin design details

Temporary sediment basin — section



STABILIZATION

Stabilization deadlines run on a short clock

Trigger	Earth disturbance permanently ceases, or temporarily ceases and will not resume for more than 14 calendar days
Initiate	As soon as practicable, and no later than the end of the next work day
Complete temporary	Within 14 calendar days after initiation
Maintain	Keep stabilization and sediment controls functional until final stabilization
Final	Achieve final stabilization before terminating permit coverage

Normal final stabilization: uniform perennial vegetation at 70% or more of native background vegetative cover, or equivalent permanent stabilization.

05

Field compliance

Inspections, response clocks, dewatering, washout, and records

Choose an inspection schedule and hold to it

	Event-based option	Weekly alternative
Routine frequency	At least once every 14 calendar days	At least once every 7 calendar days
Rain trigger	Within 24 hours after 0.5 inch or more	No separate storm-triggered inspection
Rainfall tracking	Required and must be reliable	Not relied upon for scheduling
Trade-off	Fewer routine visits, more tracking burden	Simpler scheduling, more routine visits

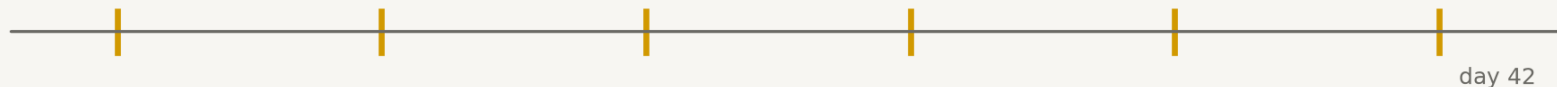
Pick the option that matches your staffing. Sites with no reliable on-site rain gauge and no dedicated inspector usually do better on the weekly alternative.

Two schedules, six weeks

Event-based option: every 14 days, plus within 24 hours of 0.5 inch or more



Weekly alternative: every 7 days regardless of rainfall — no separate storm-triggered inspection



Same six weeks, two compliance paths. The event-based option produces fewer visits only if rainfall is tracked reliably enough to prove it.

What every inspection must cover

- All erosion prevention and sediment control measures, including condition and effectiveness.
- Discharge points and visible evidence of sediment leaving the site.
- Locations where additional or modified controls are needed.
- Vehicle entrances and evidence of track-out onto public roads.
- Waste, washout, fueling, and material storage areas.
- Temporary and permanently stabilized areas.
- Active dewatering operations and their discharge quality.
- Visual characteristics of discharges and any incidents of noncompliance.

Response clocks after an inspection

Immediately

Correct controls that were intentionally disabled, removed, or run over

Before next rain

Complete maintenance and repairs where feasible

Within 24 hours

Complete the written inspection report

Within 7 days

Revise the SWP3 and site map when a change is triggered

Dewatering and concrete operations

Dewatering

- No discharge of excavation or trench water without sediment and erosion controls
- Observe and evaluate controls each day discharge occurs
- Use a stable, non-erosive discharge point
- Document visual quality, operating condition, and corrective action
- Size bags, tanks, basins, or treatment for expected flow and sediment load

Concrete and washout

- Prevent concrete production wastewater from reaching state waters or the MS4
- Use structurally contained washout areas with adequate capacity and freeboard
- Show washout locations on the SWP3 map
- Keep precipitation and run-on out where practicable
- Cities such as Dallas expressly prohibit cement, lime, mortar, and washout water entering storm drainage

Records to keep and where to keep them

- Current SWP3 with dated revisions, available at the site or a nearby field office.
- NOI, site notices, MS4 transmittals, and operator delegation documentation.
- Inspection reports, rainfall records, and photographs.
- Corrective action log with dates identified and dates completed.
- Stabilization initiation and completion dates by area.
- Dewatering observation records and washout maintenance records.
- Retain records as required after termination — confirm the current retention period in the operative permit.

06

Closeout and local requirements

Terminating coverage and meeting rules that go beyond the state permit

Terminating coverage correctly

- Achieve final stabilization of all disturbed areas, or transfer operational control to a new operator who obtains coverage.
- Remove temporary controls that are no longer needed, and stabilize the areas they occupied.
- Clean out and convert or remove temporary basins per the approved conversion plan.
- Submit the NOT through STEERS and remove the site notice when conditions are satisfied.
- Coverage — and the obligation to inspect and maintain — continues until the NOT is properly submitted.

LOCAL REQUIREMENTS

Local rules are examples, not a statewide standard

Austin

Temporary erosion and sedimentation controls required until permanent revegetation is established, with additional certified-plan and water-quality requirements in the Barton Springs Zone.

San Antonio

Certified SWP3 provisions, posted permits, certified inspectors, inspection reports, and delivery of notices to SAWS.

Dallas

Comply with the CGP, provide the SWP3 to the city, install initial controls before establishing the site, and maintain controls through final stabilization.

Your jurisdiction

Never assume. Pull the current ordinance and criteria manual for the specific project location before design.

LOCAL REQUIREMENTS

Local due diligence checklist

Current stormwater ordinance

Drainage or criteria manual

Erosion control standard details

Grading permit checklist

SWP3 review checklist

Local inspection frequency

Required credentials or certifications

NOI, notice, and NOT delivery instructions

Fees and enforcement procedures

Compliance risk in practical terms

- Published TCEQ orders have addressed construction beginning without authorization, unauthorized sediment or concrete discharges, missing site notices, absent SWP3s, and ineffective erosion controls.
- Texas law permits substantial daily civil penalties for violations within TCEQ water quality jurisdiction, and each day of a continuing violation may be treated separately.
- Practical exposure extends beyond penalties: stop-work orders, schedule delay, offsite cleanup, neighbor complaints, and reputational harm with the reviewing MS4.
- The controls that prevent enforcement are unglamorous — installed perimeter, documented inspections, and timely stabilization.

Treat this as compliance risk framing, not a prediction of the penalty for any specific site.

Ten takeaways to carry back to the office

- 1 5 acres sets the permit category
- 2 10 acres per drainage location triggers basin analysis
- 3 Common plan governs, phasing does not escape it
- 4 Screen receiving waters and overlays early
- 5 Identify common drainage locations on the map
- 6 Use phased site maps over 10 acres
- 7 Prevent erosion before capturing sediment
- 8 Document infeasibility as engineering judgment
- 9 Track the 14-day stabilization clock
- 10 Close out with the NOT

Resources to bookmark

- [TCEQ Large Construction Activities](#)
- [TCEQ Applicability Tool](#)
- [TCEQ Common Plan Guidance](#)
- [TCEQ Electronic Submissions \(STEERS\)](#)
- [TCEQ Surface Water Quality](#)
- [TCEQ Edwards Aquifer Program](#)
- [TxDOT SWP3 Guidance](#)
- [TxDOT Construction BMP Resources](#)
- [NCTCOG iSWM Construction Controls](#)

Current as of September 18, 2026. Verify the current TXR150000 permit, receiving MS4 requirements, and project-specific approvals before use.

Questions and project-specific discussion

Bring your common drainage locations — we can walk the 10-acre test on a real site.