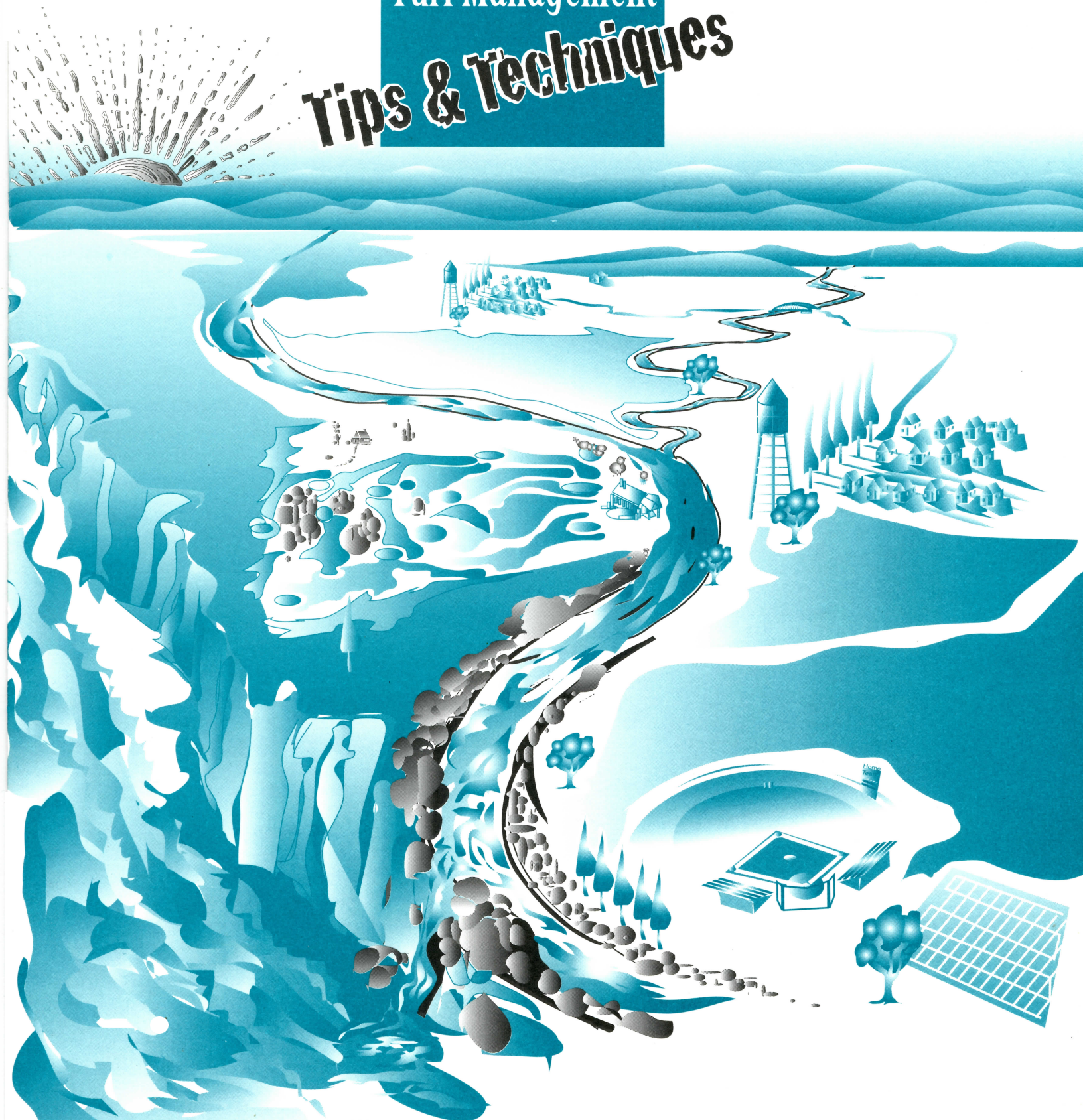


Parks and Recreation Turf Management *Tips & Techniques*



Protecting Water Quality

PROTECTING WATER QUALITY

It's Your Responsibility!

Urban pest control professionals provide value to their customers by using the best practices and products to control insect pests, weeds and rodents. An important responsibility of each professional applicator is safeguarding water resources.

Any pest control or lawn care product used outdoors can potentially end up in water if the applicator isn't careful. This can happen when a product is washed away from the treated area by over-irrigation or heavy rainfall. Improper application (drift onto sidewalks and driveways) can increase the potential for runoff if the contaminated area is sprinkled or rained-on while residues are still present. By taking a few simple precautions, pest control or lawn care products will stay where they belong – on the treated area.



Scout The Treatment Site

Locate all storm water drains and identify water bodies such as streams, ponds, wetlands and areas of natural runoff before starting work. Also look for well heads.

The Treatment Site

Avoid spraying or dry granular applications on windy days. Many labels prohibit applications in wind. Use application techniques to prevent products from landing on the pavement or other surfaces and washed into storm drains.

Avoid applications just before rainstorms. Runoff from a treated area could enter storm drains and contaminate waterways.

Do not apply herbicides, fertilizers or pest control products within 6-10 feet (less if the label specifies) of any well or water body, and always ensure that no products enter the water.

Reduce spray drift by using nozzles that produce larger droplets. Lower sprayer pressure also reduces drift potential.

Use deflector shield guards on granular spreaders when applying products near surfaces such as driveways, sidewalks, cart paths or streets. Sweep up or blow materials back on the application site.

Mentally picture where an accidental spill or hose rupture might flow. Be prepared to respond.

After turf or landscape treatments, notify customer or irrigation managers about proper watering practices to prevent runoff.

Irrigation Tips

Encourage customers or facility managers to use good irrigation practices: when watering a treated area, don't saturate the soil to the point of runoff. Runoff could enter drains or waterways and cause contamination.

Keep sprinklers adjusted: prevent overspray and runoff from paved areas.

Efficient irrigation wets only the upper 6-12 inches of the soil profile, does not saturate the soil and does not cause runoff. Heavy clay soils are more prone to runoff.

Sloped areas or compacted soils need to be irrigated in short, frequent irrigations.

When a product requires watering-in (fertilizer/insecticide/herbicide combinations), use frequent, light waterings after the application. Never flood an area causing runoff into storm drains or waterways.



Labels and MSDS

The label is the law. Follow all label directions and prohibitions for the safety of you, your employees, your customers and the environment.

Label directions are written to help you get maximum benefits with minimum risks. Never exceed label rates. More is not better: it's costly, wasteful, illegal and you lose the safety margin built into label use instructions.

Using pest control products differently than the label states is against state and federal law. It's also unwise.

Review the label before mixing or applying pest control products: check for post-application recommendations such as watering and review with facility managers if necessary.

Have access to a Material Safety Data Sheet (MSDS) at all times. Review and follow all safety instructions.

Sprayers, Trucks and Mixing Fertilizers/Pest Control Products

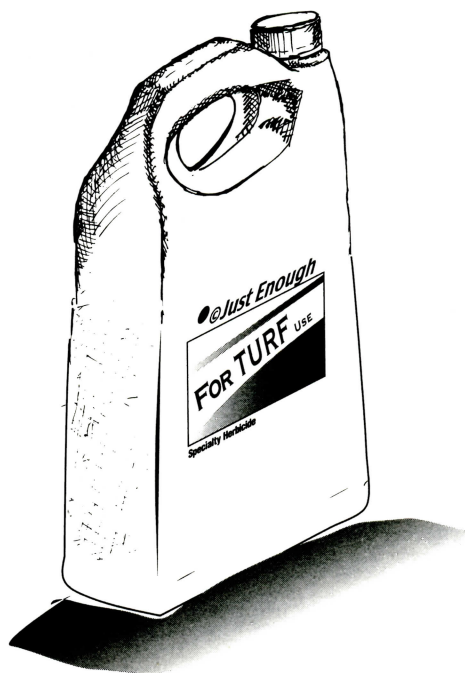
When possible, mix and load on an impervious mix/load pad equipped with provisions for collecting and reusing spilled or waste material.

When filling, prevent back-siphoning by keeping the fill hose above the solution level and out of the tank. Use an approved backflow prevention device such as a double check valve assembly on the fill hose.

Do not mix chemicals within 100 feet of any well, sinkhole or water body.

Calibrate your sprayer or spreader according to manufacturer specifications or label directions. Wipe-up obvious spills on equipment before washing.

Sweep-up and collect any granular materials from sidewalks, gutters or roads after each application.



Product Selection

Choose a product only after identifying the weed/pest and confirming the application site is listed on the label.

Use lowest effective dosage prescribed on the product label when possible.

If available, use pre-measured, water-soluble packets or granular formulations.

Use a surfactant/adjuvant when recommended by the product label. Spreader/stickers may improve the efficacy of pest control products at lower doses by ensuring better coverage. They also can prevent wash off during light to moderate rainfall.

Be familiar with the product you select: does it have potential to move off-site; does it have an odor; does it have application restrictions? Match the product to each site treated.

Rinsate and Leftover Disposal

Avoid disposal problems by planning ahead and mixing only the amount needed at the site or for the day's work.

Triple rinse or pressure rinse empty containers, pouring the rinse into the spray tank. Remember to leave enough room in the tank for container rinsewater.

Never pour leftover pest control products down any type of drain (indoor or outdoor sink, toilet, etc.). Most drainage eventually enters waterways after leaving water treatment plants.

Apply leftover pest control products to sites listed on the label and approved for treatment by the facility manager or customer.

Sweep-up and collect any granular materials from sidewalks, gutters or roads after each application.

If you must dispose of leftovers, see instructions on the label or MSDS or contact local/state environmental control or agricultural agency.



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Managing Spills

Check MSDS

The best source of spill clean-up information is the Material Data Safety Sheet (MSDS). While your reaction to each spill should be based on the product spilled and severity of spill, here are some tips to consider. Remember, don't wash away spills: runoff can pollute surface or groundwater.

Stop the leak!

- Right overturned container.
- Wrap a rag around a split hose.
- Close the shut-off valve.
- If necessary, divert a stream of liquid before controlling the source.

Contain Spill

- Dam the path of the spill if headed for a drain or waterway.
- Check where flow might go if containment is breached.

Clean-up Spill

- Clean-up spill immediately.
- Clean-up procedure depends on the chemical and severity of the spill.
- See label recommendations for handling spills of individual chemicals.
- Call CHEMTREC at 1-800-424-9300 for emergency information.
- Contact appropriate local or state agency for spill reporting requirements

Spill Clean-up Tips

- Keep supply of absorbent material on hand.
- 10-pound bag of clay-based pet litter works well.
- Operator must have access to MSDS or product label during mixing and loading.

Sacramento Stormwater Management Program
Sacramento Regional County Sanitation District
City of Modesto Stormwater Program