

**SUMMARY OF FIRE CHEMICAL APPLICATIONS IN WATERWAYS AND/OR  
THREATENED AND ENDANGERD SPECIES HABITAT  
2008**

<b>Fire Name and Date of Occurrence</b>	<b>Location (include Lat/Long, district and forest)</b>	<b>Description of site, T&amp;E or proposed species, waterway.</b>	<b>Direct/Indirect Environmental Effects of the Fire Chemical(s)</b>	<b>Estimated Quantity: a). in 300' Buffer Zone and/or b). in Waterway</b>	<b>Product Applied</b>	<b>Exposure Method: (i.e. Large Airtanker, SEAT, Helibucket, Helitanker, Ground)</b>	<b>Accidental or an exception to 2000 Guidelines?</b>
Corn Creek Fire; Cherry Hollow, North End; 6/16/08	Escalante RD, Dixie NF, UT	No TES. Remnant population of Colorado River cutthroat trout (FS sensitive) in Water Canyon (Corn Creek is a tributary).	No fish mortality was observed. Long-term impacts to Colorado River cutthroat trout not anticipated.	Drop 1: ~244 gal. into creek Drop 2: ~669 gal. into creek Approx. 10.5 total acres affected within 300' buffer.	Phos-Chek LC-95A	Large airtanker and/or SEAT	Accidental
Corn Creek Fire; Cherry Hollow, South End; 6/18-19/08	Escalante RD, Dixie NF, UT	No TES. Remnant population of Colorado River cutthroat trout (FS sensitive) in Water Canyon (Corn Creek is a tributary).	No known fish populations exist in area.	~190 gal. into creek. Approx. 4.0 acres affected within 300' buffer.	Phos-Chek LC-95A	Large airtanker	Accidental
Deardorff Fire; Deardorff Creek; 7/2/08	Malheur NF, OR UTM-383167m x 4913907. River mile 6.7, Deardorff Creek	Rosgen B channel contains Columbia River bull trout and Mid-Columbia River steelhead. Area includes Mid-Columbia River steelhead critical habitat.	No fish observed, although vegetation coverage was very dense.	Minimal spotting, sustained. Approx. 300 yds. of buffer zone affected; approx. 30 yds. of waterway affected; estimate 1100 gals. total	Phos-Chek LC-95A	Large airtanker	Accidental
Lantz Fire; Log Spring Crk. 7/14/08 (discovered on 8/8/08)	Mendocino NF, CA. Grindstone RD. N39°50' 08.4" x W122° 47' 10.3"	Small headwater perennial stream. Ave. width ~12". California Central Valley steelhead fish habitat minimum of 2 miles downstream.	No anticipated effects on fish or critical habitat. Chemical did not enter waterway, remained at least 200' away.	Unknown quantity of retardant reached approx. 100' into buffer zone (remained 200' from waterway). No retardant reached waterway or TES habitat.	Unknown (nearest ATB is Redding, CA. Phos-Chek D75-R - sz)	Large Airtanker	Accidental
Mill Fire of Soda Complex. Thomas Creek headwaters. 7/25/08	Mendocino NF, CA. Upper Lake RD. N39°29' x W123° 5'30"	Stream not shown on map. Ave. width~18". Occupied steelhead habitat ~1 mile downstream. Northern California steelhead fish habitat downstream consists of 4' widths x 3' depths.	Minimal amount entered stream. No direct or indirect effects to downstream steelhead were detected. Fish were visible in downstream locations 2 days after application.	<0.01 gallon estimated to have reached waterway. 9.6 gals. of foam were mixed with unknown quantity of water.	Phos-Chek WD 881 class A foam	Helicopter Bucket	Accidental
Mill Fire of Soda Complex. Thomas Creek headwaters. Discovered on 7/27/08 (drops occurred at least 1 week	Mendocino NF, CA. Upper Lake RD. N39° 27'30" x W123° 5'.	Drops occurred in 3 separate streams not shown on map, nor visible from air. Drops ranged from 0.5 mile to 1 mile upstream of occupied Northern California steelhead habitat. Waterways averaged less	No direct or indirect effects to downstream steelhead were detected. No visible effects to aquatic invertebrates. Multiple age classes of fish were visible in Thomas Creek and tributaries 2 days after	<1 gallon made it into streams. Unknown quantity or retardant affected buffer zones.	Unknown (nearest ATB is Redding, CA. Phos-Chek D75-R - sz)	Large Airtanker	Accidental

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prior)		than 6' wide.	application.				
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9/7/08	Salmon Falls Creek; 42.41.00 x 114.51.59	Drift fell within 30 feet of Salmon Falls Creek. No threat to TES.	No know or anticipated environmental effects.	Drift; Level 1 ( <i>coverage level?</i> )	Phos-Chek LC-95A	Large Airtanker	Accidental
Red King Fire; 7/24/08	Willamette NF, McKenzie River RD, South Fork of McKenzie River downstream of Cougar Dam. N44° 09' 12.87" x W122° 15' 19.95"	Threatened species potentially impacted include Upper Willamette River spring Chinook salmon and Columbia River bull trout. Area south of dam designated as critical habitat and also as Essential Fish Habitat. Width of river at point of drop ~90 feet. Width of retardant drop affecting river also ~90 feet.	No dead fish were observed. Emergency consultation initiated on 7/25/08. Water analysis for total phosphates was undetectable at EPA reporting limit (0.1 mg/L).	~284 gals. appeared to enter waterway and buffer zone. Spray drift from drop reached ~150 feet.	Phos-Chek LC-95A	Airtanker	Accidental
8/15/08 (discovered on 8/16/08)	Mt. Hood NF, Barlow RD N45 22.179 x W121 38.408	Drop occurred approx. 100' from small 1 <sup>st</sup> order, non-fish bearing channel. Wetted-width ~1'. Unnamed waterway. Lower Columbia River steelhead trout population and habitat ~4 miles downstream.	Chemical did not enter waterway, remained at least 100' away. Majority of chemical observed in canopy. No dead macro-invertebrates or salamanders reported downstream of drop area.	Load estimated at 1800 gals. No retardant entered waterway	Listed as LCR-R, described in narrative as LCG-R from Redmond. ( <i>Redmond, Troutdale and Moses Lake use Phos-Chek LC-95A-sz</i> )	Large Airtanker	Accidental
9/17/08	Mt. Hood NF, Hood River RD, Polallie Creek, 2.25 miles upstream of confluence with the East Fork Hood River. T2S R10E, Sec PB43	Due to limited suitable habitat, Polallie Creek is not believed to support any fish population. Lower 0.5 mile of the creek is designated steelhead critical habitat, and Lower Columbia River steelhead present in East Fork Hood River. Creek width ~6' with ~7% stream gradient.	No direct or indirect effects to downstream listed fish or critical habitat were detected. No evidence of mortality to aquatic fauna observed.	Estimate 400 gal. in buffer zone with approx. 40 gals. entering waterway.	Listed as Fire-Trol LCG-R. ( <i>probably Phos-Chek LC-95A-10/9 email w/G. Asbridge - sz</i> ).	Airtanker	Accidental

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9/26/08	Mt. Hood NF, Hood River RD, Eliot Branch of the Middle Fork of Hood River. Drop occurred 3.2 miles upstream of confluence. T2S, R9E, Sec PB39	Eliot Branch was scoured by large debris flow in 11/06. Electrofishing in Spring '07 & '08 found no fish. Lower 1 mile of Eliot Branch designated steelhead critical habitat. Lower Columbia River steelhead and Columbia River bull trout present in the Middle Fork Hood River and possibly lower 1 mile of the Eliot Branch. Lower Columbia River Chinook and Coho salmon present in Middle Fork Hood River, but not Eliot Branch. Drop impacted waterway is ~8' wide with ~7% stream gradient.	No direct or indirect effects to downstream listed fish or critical habitat were detected. No evidence of mortality to aquatic fauna observed.	Estimate 500 gal. in buffer zone with approx. 20 gals. entering waterway.	Phos-Chek 259-F	Helicopter Bucket	Accidental
Slide Fire; NW side of Bear Creek; 9/14/08, 1100.	San Bernardino NF, Mountaintop RD, Bear Creek near confluence with Siberia Cr. Keller Peak Quad T1N, R1W, Sec. 5, N/W, N/W.	Site is designated critical habitat for Southwestern Willow Flycatchers. No known nesting territories in this portion of upper Bear Creek, although due to remoteness, it's not a high priority area for survey efforts. No other known TES at this site.  No retardant entered waterway.	Unlikely to impact willow flycatchers due to time of year of this occurrence. Species typically gone from area by mid-Sept. Impacts to nesting vegetation would be minimal (fertilizer burn) and would be gone by next spring/summer.  No emergency consultation required; no impact to southwestern willow flycatchers.	No retardant entered waterway. Approx. 2700 gals. of retardant deposited in buffer area.	Phos-Chek D-75F	2 SEAT loads for 4 drops total into buffer zone (2 drops = 1544 gals. total; 1 drop = 783 gals; 1 drop = 400 gals.)	Exception

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Royce Butte Fire; 9/16/08, 1630	Deschutes NF, Crescent RD, meadow headwaters of class 3 tributary of Odell Creek	<p>Site is a wetland, marshy area feeding into Odell Creek. Drop did not land in flowing stream channel. Drop site located approx. 1800' from Odell Creek. No surface water connection between drop site and Odell Creek.</p> <p>T&amp;E species of concern is bull trout in Odell Creek drainage.</p>	<p>Do direct effect to meadow. No amphibians or reptiles observed. Expecting vegetation growth due to fertilizer flush.</p> <p>No known direct effect to Odell Creek. No fish mortality observed. Visit to area on 10/1/08 revealed retardant accumulation in two surface pools. Live water spiders and 1 tadpole observed in pools. Dead dragonflies observed in pools.</p> <p>Water samples collected on 10/9/08 showed elevated levels of phosphorus and ammonia nitrogen when compared with groundwater and control surface water samples.</p>	2500 gallons in meadow wetland area.	Phos-Chek LC-95A	Large Airtanker	Accidental