

A Salmon's Guide



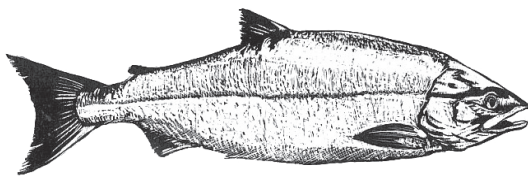
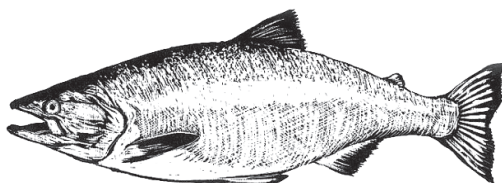
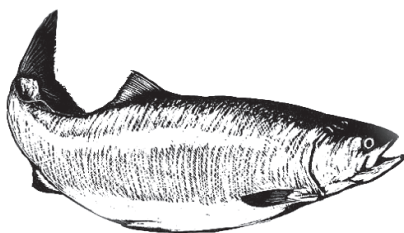
to
Lake Forest Park



“If there is magic in this world, it is to be found in water.”
-Loren Eisely, *The Unexpected Universe*

A Salmon's Guide to Lake Forest Park

A brief geography of the streams, wetlands,
woodlands and parks of an extraordinary city.



Tommy Ogilvie

Revised, December 2006, from the original 2001 publication by the Lake Forest Park Stewardship Foundation. This revised edition is made possible through the generosity of a SPLASH Grant, awarded by King County Department of Natural Resources and Parks.

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Maps—parks, streams and wetlands of Lake Forest Park

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Introduction

We who live in Lake Forest Park inherit some special blessings. Clear, singing streams criss-cross our city. Wooded bluffs and wetlands teem with birds and other creatures who embellish and brighten our lives.

Our little City has a peculiar history with environmental causes. Some of the creeks are home to salmon and trout. All of them used to be. Time and our ways of using land have not been kind to them. Parts of our leafy little city, including the shopping center, are built on what once were wetlands. Filling and destruction were commonly permitted as late as the 1950's and 1960's. Many of these decisions were made before Lake Forest Park was incorporated as a city in 1961.

Today, the city is a leader in protecting the extraordinary beauty and fragility of our green and wet landscape. Hundreds of local citizens focus their energy on our shared natural treasures and give their time and financial support toward protecting them.

Perhaps this little book can give that movement a boost. It's a brief geography, with some history, of the streams, wetlands, bluffs, public parks and open spaces in your city. There are maps to help you locate these special places. State Fish and Wildlife biologists have contributed suggestions for improving our streams, and ways in which you can help.

We hope you'll find something here you didn't know, and perhaps be moved to join your community's effort to stay green and grow greener.

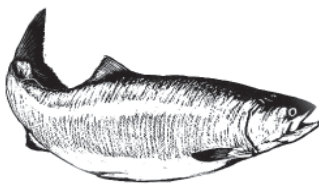




photo by Casey Dougherty

McAleer Creek

“We just called it ‘Big Creek’ in the 1930’s. We’d ride our bikes down there and watch the sockeye spawn. They turned the creek red. Bank to bank, solid with red fish.”

– Bill Schoening, Lake Forest Park

McAleer Creek is a wonder.

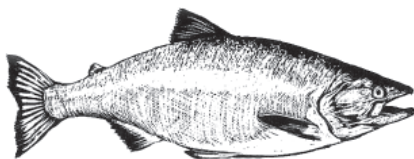
Despite years of abuse – flooding, siltation, pollution – the salmon still live here. Not in anything like the numbers Bill Schoening remembers from the 30’s, but sockeye, coho and the magnificent chinook still hatch and grow in Lake Forest Park. Salmon sightings offer a glimpse of nature’s resilience. Their presence is a symbol of renewal, and a metaphor for the wildness that remains.

They leave home as small fish and come back as very big fish. They travel from McAleer Creek through Lake Washington, through the Ballard Locks to Puget Sound and the Pacific. After three to six years, they return to spawn and die in the creek and its tributaries. Two city parks, Blue Heron and Animal Acres, offer salmon viewing in the fall, winter and early spring, when the big fish make their last journey up the creeks (more on the parks, page 27).

McAleer is also home to a tenacious population of colorful cutthroat trout, including some large resident cutthroat from Lake Washington, that migrate up the creek to spawn.

McAleer is the larger and more southerly of our two salmon-bearing streams that drain into Lake Washington near the shopping center. It flows under Bothell Way between the two gas stations at the end of Brookside Boulevard. The other major creek is Lyon, which enters the lake a short distance to the northeast. (For more on Lyon Creek, see page 15).

McAleer rises at the west edge of the Nile Shrine Center and Golf Club near 205th Avenue (Ballinger Way) in the city of Mountlake Terrace. Its upstream sources are Hall Lake, Hall Creek and Lake Ballinger. All three carry high levels of silt, pesticides and fertilizers. The cities of Edmonds, Mountlake Terrace, and Lake Forest Park have tried in recent years to reduce the pollutants flowing into McAleer Creek. The sources are so numerous and varied – from highways, parking lots, lawns and industrial sites – the best local governments can offer currently is to *slow the increase* in pollution.



(Editor's note: to simplify the text we've dropped the designation "NE" from all locations. All streets mentioned here carry the prefix "Northeast" and all avenues have the suffix "Northeast.").

A large number of small sources may contribute to the fecal coliform contamination of McAleer Creek. It's a product of human and animal waste. Pollution occurs if we have livestock too close to streams or don't pick up after our pets and also from failing septic systems. What can you do? When you walk your pets carry a plastic bag and pick up all their waste and keep them from walking in a stream. It's important to provide a wide, vegetated buffer between your animal pens and any stream—small or large. All of this flowing water ends up in one of our creeks. And if you have a septic system, have it cleaned and inspected regularly (every 5 years is recommended) to be sure it's functioning properly.

After crossing the golf course, McAleer passes under Interstate 5 and enters Lake Forest Park at 196th Street, between Forest Park Drive and 15th Avenue, where it flows through a flood control system. Huge chinook salmon have been known to make it at least this far upstream.

The creek meanders through residential streets and a wild, wooded ravine before crossing under Perkins Way downhill from the old Cedarbrook

School grounds. The City of Lake Forest Park owns about one acre at the lower end of the ravine, where it meets Perkins Way. A prime bird habitat, this canyon was recently known to be home to a family of Cooper's Hawks. Other unusual birds which have been seen in this reach of the creek are Dippers and Green Heron. It's also a favorite haunt of Kingfishers and Great Blue Heron.

A vigorous tributary rises just above Lago Place, to join this reach of McAleer. You can see Whisper Creek as it flows southward under Perkins Way, just below the old Cedarbrook School. It bends northward, picks up Forest Spring and Sarah's Creek, and enters McAleer at the bottom of the hill. Young salmon were found in Whisper creek in the Spring of 2001.

Bluffs above Perkins Way and 180th Street slumped and eroded severely in the past several years, dumping tons of silt onto the stream gravels essential to salmon spawning. A major landslide blocked the creek in 1981. Eagle Scouts and the Environmental Quality Commission, a volunteer agency of the City of Lake Forest Park, helped to restore it.

As far as salmon and trout are concerned, biologists consider this shady, brushy section of McAleer Canyon to be the healthiest water in Lake Forest Park. It also provides a serenity fix for walkers and for those drivers who slow down enough to see and hear it, as it winds along Perkins Way and 180th Street. It enters Animal Acres Park at 178th Street, across from the Presbyterian Church.

The sidewalk where the creek flows under 178th Street provides a good fish viewing spot; a few big salmon spawn each year in the shallows just downstream, and others school up just below 178th Street to rest before entering the culvert.

Downstream, the creek is exposed to the sun, which is bad for fish, as it crosses backyards and lawns on the way to Blue Heron Park, at the intersection of Brookside Boulevard, Hamlin Way and Bothell Way. Leaving the park, the creek flows under Bothell Way into a series of flood control devices and fish ladders. A high water by-pass takes part of the winter flow through a culvert under 170th street and Shore Drive, to join the main creek just before it empties into Lake Washington near 168th Street and Shore Drive.

In the winter of 1996-1997 so much storm water rushed into the creeks from roofs, driveways and streets that McAleer Creek flooded severely, with extensive property damage.



photo by Casey Dougherty

An alder (these are on McAleer Creek) can be a salmon's best friend. They protect the stream from summer heat, provide insect food for the fish and, on falling into the stream, create pools and hiding places for trout and young salmon.

Long time Lake Forest Park resident, Bill Schoening, uncovered old government documents that explain the name of the creek. The Hugh McAleer family owned the land around what was then McAleer Lake, now Lake Ballinger, in the late 1800's. Not much is known of the family except that they were in the timber business and gave their name to the creek.

A few years later, Richard Ballinger, for whom the lake and highway are now named, turned McAleer Creek into a narrow wooden flume. Apparently, Mr. Ballinger speeded the creek through a "box" of logs and planks to form a fast-moving channel to carry logs from McAleer Lake (now Ballinger) to Lake Washington. It seems to have been used for only a few years, while his company was clearing what is now the city of Edmonds, storing the logs in Lake Ballinger and sending them down the flume which we know as McAleer Creek.

We can only guess at the effect on the salmon runs. Where the water was diverted into a separate flume, the salmon redds (nests of eggs) must have dried out. Or, if an existing channel was boxed in, the rushing water would most likely have scoured out the spawning gravels and wrecked the pools. However, by the early 1930's, when Bill Schoening and his boyhood companion John Clayton were playing on the streams, McAleer Creek was again clogged every year with thousands of spawning salmon.

If they recovered once in such numbers, couldn't we hope that it could happen again, if we learn what to do and work at it?



Brookside Creek

A mossy, forested wetland stretches along both sides of 28th Avenue between 166th and 178th Streets. It is Lake Forest Park's last large, undeveloped green corridor, only 20-plus blocks from the Seattle city boundary. Two small creeks rise here and flow in opposite directions. Both creeks contribute importantly to the life of McAleer Creek.

Hillside Creek, the smaller of the two, flows northwest, then changes its mind and makes a long loop among hillside houses, turning toward the lake near 178th Street and 29th Avenue.

It joins Brookside Creek in the lowlands, near Brookside School.

Brookside Creek, the focus of hope and controversy for the past several years, begins in a couple of spring-fed ponds at the base of some sand bluff, and flows easterly, toward Lake Washington. It winds through a large wetland for a few hundred feet, then enters a long briar-tangled ravine that carries the creek to 35th Avenue near Brookside School. In a wetland near the school, it merges with Sheridan Creek, a short tributary that flows from 162nd Street and 36th Avenue in Sheridan Heights.

The combined main stream enters McAleer Creek in a heavy thicket across from the school, at the south edge of Animal Acres Park. This water provides a superb "off channel" growing place for small salmon.

At the east end of the school parking lot, you can find a short trail leading to an attractive bend in the stream. This is where, for many years, Brookside School children have released the salmon hatched in their school aquarium, and watched for adult fish to come back from the sea. It's part of a continuing effort by teachers and students of Brookside and Lake Forest Park Elementary, Kellogg Middle School and Shorecrest High School, who for more than thirty years have removed trash from the streams, renewed native plants, hatched and planted salmon.



A state Fish and Wildlife biologist described the upper reaches of Brookside Creek and its associated wetland ponds as classic coho salmon waters that have suffered mightily from human activity. Tons of trash and dirt were dumped into the wetlands as late as the 1970's. A series of backyard dams and culverts create stream barriers blocking the passage of young coho that would otherwise venture all the way to the headwaters, to grow there until they're ready to seek their fortune in Lake Washington and the salt water.

The Lake Forest Park Stewardship Foundation has taken on the Brookside Creek drainage as a special project. Working with the City of Lake Forest Park, StreamKeepers, the Environmental Quality Commission, Scouts, Trout Unlimited, the Washington Department of Fish and Wildlife and Shoreline School District teachers and students, the Foundation has set as its goal a free-flowing, salmon-friendly creek from the wetland ponds to McAleer Creek.

The headwaters of Brookside Creek came very close to being bulldozed and filled as a site for new houses. The Lake Forest Park Stewardship Foundation intervened in 1999, to protect the wetlands, steep bluffs, the birds and wildlife, and potential salmon rearing waters. After a hearing in King County Superior Court, efforts for development ceased. Not long after, the city and the Foundation worked together to obtain private and government grants to buy the thirteen acres of woods and water.

That's how the people of Lake Forest Park came to own Grace Cole Nature Park, a spectacular nature preserve, named for long-time school board member, state legislator and neighbor of the preserve. It's a critically important wild-land, not only for the salmon and trout of McAleer Creek, but for numberless song birds, ducks, woodpeckers, hawks and owls that depend on this particular wetland forest for nesting and food.

The new park would not have come to be without a generous state appropriation secured through the tireless efforts of State Senator Darlene Fairley. Former Governors Dan Evans and Gary Locke, and U.S. Senator Patty Murray voiced outspoken support. In Sen. Murray's words, the park will "provide a fine outdoor science classroom for Shoreline District school children, who were so much a part of Grace Cole's life."

Salmon and Brookside Creek: together again?

In 2001, the Lake Forest Park Stewardship Foundation took on its biggest challenge ever – to make Brookside Creek salmon-friendly, from its junction with McAleer Creek near Brookside School, to its headwaters in Grace Cole Nature Park. It meant removing a series of man-made barriers to fish passage, and finding ways to control storm water runoff as well as pollution by household and automotive chemicals.

We don't like to boast (well, maybe we do), but progress has been remarkable. In 2003 the Foundation completed the first phase of the restoration – breaching a 40-year old earthen dam and installing a cedar log weir that allows fish passage upstream, just below the lower reaches of Grace Cole Nature Park. That project involved 300 hours of volunteer time, and generous cooperation from the property owners, Launa and Rick Hoy. The Community Salmon Fund – a collaboration between the National Fish and Wildlife Foundation and the King County Department of Natural Resources and Parks, granted the Stewardship Foundation \$49,000 for essential expenditures.



The results, a splendid, rock-lined stream with natural vegetation along its side, so impressed the grantors that they funded a second, even more challenging Stewardship Foundation project downstream.

In a small downstream section of Brookside Creek, two man-made waterfalls and a driveway culvert blocked fish access. The Stewardship Foundation won a total of nearly \$86,000 in grants to remove the barriers and naturalize the stream in a rocky, gently-inclined waterway allowing spawning adults and young salmon to pass upstream. After months of planning and consultation, the actual work was performed in two weeks, with superb cooperation by the Wilcox family, who own the property and live only a few yards from the renovated stream.

The contractor for both these projects was Brian Bodenbach of the Biosphere Company. The first was designed by HartCrowser Engineering and the second by Steward and Associates. Adopt-a-Stream, regional non-profit heroes of stream restoration, donated some of the native plants and labor to revegetate the stream following the renovation. Additional labor came from dedicated volunteers.

The third, final, and most challenging, barrier remains. It's a long, old, and narrow culvert just downstream of the Wilcox restoration. Citizens living near the creek when the culvert was first put in place told of hearing big salmon flopping against the lower end of the culvert, trying and failing to make their way upstream. Again, the homeowners favor creating a salmon-friendly environment. The Foundation will continue to work with them to reach mutually agreeable solutions.

To help quantify the impact of restoration work, and to determine if the streams can continue to support fish, the Stewardship Foundation is collaborating with StreamKeepers to conduct what is called Benthic Inventory of Biological Integrity (BIBI for short). It's an evaluation of the worms and insect larvae living in the creeks, which are the primary food source for fish. They could use more volunteers. If you want to help, call the City at (206) 368-5440.

Brookside Creek has been neglected and abused for decades. Former residents who grew up along the creek tell of seeing large fish strewn along the creek bed in the fall, and habitat biologists have called the Brookside drainage "classic Coho water". The restoration work has turned up two small but hopeful "index" critters. Pacific Giant Salamanders were found at

both the Hoy and Wilcox projects. These amphibians require basically the same stream conditions as salmon. A couple small Cuthroat trout were found in a Brookside Creek pool as water was diverted to dry the streambed during the Wilcox restoration. Once the third and final section is restored, there's every reason to expect that Coho salmon will follow their adventurous instincts upstream, to healthy rearing waters in Grace Cole Nature Park.





Lyon Creek

“It was a tiny creek, not more than two feet across, through our backyard. It was packed with big silver salmon every year.”
— John Clayton, Lake Forest Park.

“The marsh was so big, like a jungle. You could get lost in there, you really could.”
— Bill Schoening, Lake Forest Park

Until you’ve studied a map, it’s sometimes hard to know if you’re looking at McAleer Creek or Lyon Creek. The two streams enter Lake Washington only a few hundred feet apart, in what was once a wild, 17-acre marsh that comprised the lake shore where the Lake Forest Park Towne Center now stands.



photo by Asahel Curtis

Early Lake Forest Park developer, Ole Hanson, dipped his drinking cup in Lyon Creek for this 1910 real estate promotion photo. Note the woody debris in the stream, a boon to the trout and salmon present in Lyon Creek in astounding numbers until mid-century.

—Courtesy of Shoreline/Lake Forest Park Historical Museum, Barbara Bender Collection



Photo courtesy of John Clayton

Five-year old John Clayton, with his mother Mary Clayton, in their front yard on the West Fork of Lyon Creek in 1930. Clayton recalls huge salmon runs clogging the small creek throughout his childhood.

All creeks meander across their landscapes, and very early maps indicate that the streams we know as Lyon and McAleer intertwined in a shifting, changing puzzle of oxbows and bogs, and may have entered the lake as one stream, in the 1800's.

Today's Lyon Creek is the one that flows around and under the shopping center to meet Lake Washington on city-owned property just to the left (as you're facing the lake) of the Lake Forest Park Civic Club. Lake Forest Park bought the one-acre property at the mouth of the creek in 1998 to create a delightful waterside park, now called Lyon Creek Nature Preserve (see page 28).

You've most likely encountered Lyon Creek at Towne Centre or at the neighborhood business center once known as Five Corners, where Ballinger Way intersects with 35th Avenue and 185th Street. That's where Lyon Creek blew itself out of a concrete culvert in the December storm of 1996. The summer flow disappears briefly at this point, into an underground pile of debris in the remains of a privately-owned culvert. It's a summer barrier to salmon, but winter flows appear to allow passage upstream.

The main stem of Lyon Creek rises in a small wetland at Terrace Creek Park in the City of Mountlake Terrace, at 232nd Street and 48th Avenue. Because



Photo by Doug Mitchell

John Clayton, in the same location as on previous page, in 2001. Salmon are scarce, but the present owners, Dean and Lucy Logen, have found the skeletons of fish apparently eaten by a family of otters from a nearby wetland.

its watershed is smaller and flatter, Lyon is a smaller and swampier creek than McAleer, and fed by many small wetlands and tributaries as it makes its way through our neighborhoods. It is largely a creek of backyards and lawns, although several wooded wetlands remain and some are publicly owned.

One of the city-owned wetlands, at the end of 26th Avenue at its intersection with Forest Park Drive, is open for hiking and bird watching (expect a serious blackberry briar challenge). A good-sized pond feeds a tributary shown on early maps as Brueger's Creek, but more recently as West Fork Lyon Creek.

John Clayton recalls nostalgically this little creek as it flowed through the back yard of his childhood home, just off 185th Street, shortly downstream from the wetland.

"We had a small dam on the creek for a front yard pond. My dad built a bypass so the salmon could get around it. They'd come up there by the thousand. Dad would watch for a nice bright one and grab it, and we'd have it for supper."

Two other good-sized neighborhood creeks feed into Lyon:

McKinnon Creek, from a wetland near 45th Avenue and NE 187th Place, flowing under 40th Place to Lyon Creek midway between 40th Avenue and 178th Street.

Schoolhouse Creek, from the intersection of 40th Place and 45th Place, crossing in a pipe under the Lake Forest Park Elementary school grounds, under Ballinger Way, and into Lyon Creek just upstream from 40th Avenue.

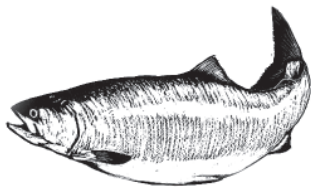
Some Lyon Creek puzzles

Steelhead trout, the marvelous sea-run rainbow, supposedly doesn't inhabit our streams. But naturalist and educator, Tony Angell, found the spawned-out body of a steelhead, where Lyon Creek passes through his back yard. It's worth noting in support of the maxim that fish go where they go, not where we expect them to go. Because King County is hard put to find volunteers to do regular fish sightings in our local streams, we have very little current information about fish in Lyon Creek. However there are some astonishing bench-marks from earlier years:

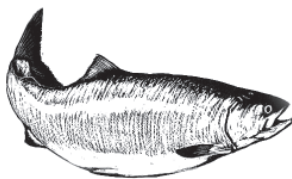
- In 1926, an early Lake Forest Park resident, Ernie Raymond, recalled catching 49 keeping-size trout from Lyon Creek on his way home from school, before dark (the legal limit was 50). Lyon Creek was a large stream full of woody debris (see page 15), and one of the most productive streams on Lake Washington, as late as mid-twentieth century.
- It's a given that streamside trees are good for salmon. They cool the water, hold the soil and provide habitat for insects on which the fish live. But in the bare, cut-over landscape of the 1930's (loggers had taken just about every tree of worthwhile size), salmon continued to clog our local creeks. Today, the trees are back but most of the salmon are gone.
- In the 1930's, a hog farm stood where the Ballinger Estates apartment complex now sits, on the north side of Ballinger Way, on 195th Street. Hog manure washed into the Lyon Creek drainage during the rainy season. Yet the salmon endured that pollution to return yearly in big numbers. (This is not meant as a call for more hog farms(!) but an indication of the endurance and resilience of the fish).

And some clues

- Lyon Creek contained the highest amounts of the insecticide diazinon, a popular lawn insecticide, among a dozen King County streams studied in 1998. Recent tests at the University of Washington indicate that diazinon interferes with the sense of smell salmon depend upon to find their way home from the salt water. (Aside from its effect on salmon runs, there are other problems with using this compound. The Environmental Protection Agency says diazinon kills more birds than any other pesticide. Also, traces of this and other lawn chemicals were found in the urine of 109 out of 110 toddlers tested in a Seattle clinic).
- Many square miles of asphalt roads, driveways and roofs now concentrate storm water into punishing torrents, damaging creek banks and carrying pesticides and chemical fertilizer from hundreds of backyards.
- Fisheries biologists believe a long list of destructive forces — over-fishing, stormwater runoff, the “hardening” of stream banks with stone or concrete, siltation from upstream development, pollution from lawns, the loss of wetlands, changes in the temperature of ocean currents — all have converged to kill off the fish in urban streams around Puget Sound.



A small number of salmon, cutthroat and at least one steelhead have found their way up Lyon Creek in the past few years. But the great runs live only in the memories of those who, like Bill Schoening and John Clayton, are lucky enough to have lived here when Lyon Creek was packed with fish.



It has a rock

In the summer of 2001 the Lake Forest Park City Council officially adopted the name Bsche'tla for a previously unnamed stream that flows into Lake Washington in the southeastern corner of the City.

Three young people, Callie, Betsy and Alec Wade, researched the history of the stream and presented their findings to the Council. They had conducted a poll among local residents at the Picnic in the Park, resulting in a tie among three proposed names: Bsche'tla Creek, Glacier Rock Creek and Red Fish Creek. They submitted the names to the Environmental Quality Commission and the City Council, who agreed with their preference, Bsche'tla (pronounced bs-cheh-tlah). It's a term from the Lushootseed Indian dialect, translated as "it has a rock." A large boulder from the glacial period sits near the mouth of the stream.

Bsche'tla rises near the Briarcrest Elementary School, flows past Acacia Cemetery and quite directly east, under Bothell Way and the Burke Gilman trail, entering Lake Washington just south of 155th Street.



Creeks with no names

Here are some “no name” creeks you may have wondered about. Most, but not all, are tiny drainages that rise in wetland springs and flow only a short distance before joining a fork of Lyon or McAleer. We’ve numbered some of them on the map with the notation NN:

NN 1) Sometimes known as “Terrace Creek,” it flows from Mount-lake Terrace into Lake Forest Park at 205th Street between 30th and 33rd Avenue. It drains into Lyon Creek at about 196th St. near 35th Avenue.

NN 2) Sometimes known as Janiki Creek, it rises in springs just off 40th Place, at about 193rd Street, to flow south and west, entering Lyon Creek at 35th Avenue, at 190th Street.

NN 3) A short drainage born in springs north of 40th Court at the equivalent of 202nd Street, joins Lyon Creek at 200th Street and 40th Place.

NN 4) Flows through a steep ravine north of Ballinger Way and Towne Centre, drains to Lake Washington under Bothell Way and the Burke Gilman trail.

NN 5, 6, 7) Short, year round tributaries to the South fork of Hillside Creek, part of the McAleer watershed.

These and other tiny streams, often no more than a foot across, are quite likely to be salmon homes. Look carefully. Very small coho venture up very small streams to find quiet waters where they may spend a full year, before beginning their long journey to the sea.

The drainage ditch along the road in front of your home may in fact be a live salmon stream, and deserves to be kept free of the grass clippings and garden trash that sometimes wind up there, along with lawn chemicals.

“Salmon make fools out of all of us,” says Kurt Beardslee, executive director of Washington Trout, a statewide organization dedicated to preserving fish habitat. “They show up in places where common sense tells us they can’t be.”

Problems with being a salmon

Winter problem: storm water

The runoff from your roof doesn't seem to amount to much, but add it to your neighbors' and their neighbors' and it adds up to millions of gallons, rushing down the street and into the storm drain, and then into McAleer or Lyon Creek as a huge slug of water.

Storm water rolls the gravel and flushes out the fish eggs; it scours the stream bottoms, wrecking the spawning areas. It erodes the banks, dumping silt on the eggs. Tiny fish that have already hatched are washed out of the streams into Lake Washington, where they become a snack for predators. Storm water also carries with it a lethal combination of pollutants, from the residue of gasoline, motor oil, transmission fluid and the like, that is always present on roadways, as well as the fertilizers and sprays used on lawns and gardens.

Summer problem: low flows

Wherever water enters and leaves the stream in a winter flood, there's not much left to keep the small fry alive during the summer. The shallow water warms up, especially if the streamside vegetation has been cleared away. A few degrees of warming and the fish are in serious trouble.



Although young sockeye salmon move to the lake soon after they emerge from the gravel, young coho need to spend a whole year in the streams and ponds, before they can safely migrate to the lake. Sea run trout spend several years in the stream before they go to the lake or Puget Sound and some trout spend their whole lives in the stream.

Wetlands are especially critical to the survival of these fish. Wetlands are the reservoirs providing summer flows when the rains are few.

Help a salmon home

Reduce runoff

“One of the most important things you can do for local fish is to control storm water,” says Doug Hennick, a Lake Forest Park resident and habitat biologist with the Washington Dept. of Fish and Wildlife. “Get as much of it into the ground as possible before it leaves your property.”

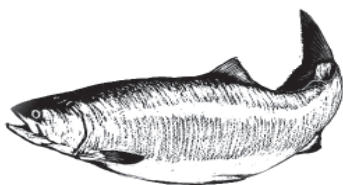
Some engineers suggest digging tiny dry wells filled with gravel at the end of the downspouts on your house. Others prefer the use of perforated underground pipe to carry water from the downspouts. You can also to reduce the amazing volume of water that runs from your driveway into the storm sewer. There are new alternatives to impervious blacktop and concrete. The whole idea is to help water penetrate into the ground so that it reaches the stream slowly, through springs and wetlands.

“If everyone would do this, you’d be surprised how much it would help the fish,” Hennick says.

Keep fish cool with shady stream banks.

A rock-lined brook, shining in the sunlight across a tailored lawn, can be a mighty pretty sight unless you’re a salmon. For them it’s devastating. Stone or board-lined banks increase the speed of the water, creating flooding and bank erosion downstream. Cleared, grassy banks allow the sun to warm the water to a level that quickly becomes lethal to fish. Rainfall carries lawn chemicals into the creek.

“We need to change our way of appreciating streams,” Doug Hennick says. “Let’s hope people are willing to appreciate the true health of the stream by keeping it shaded and leaving the stream banks natural.”



Let sleeping logs lie

There was a time when people went about “improving” streambeds by clearing them of logs and stumps. Now we know that was not an improvement, says Hennick, area Habitat Biologist for the Washington Dept. of Fish & Wildlife.

“Logs in the streambed slow down the moving water so it doesn’t scour out the gravels from the stream bed during high water,” Hennick explains. “That gravel is where the trout and salmon lay their eggs. Without it there’s no more fish.”

The logs also create small dams, providing pools of deeper water where fish can live. Logs and branches give them a place to hide from predators. Some erosion of the bed and banks may happen next to the logs, as the force of the water concentrates around and under the wood. But the wood also reduces the energy of the flowing water, so that overall there’s *less* erosion in streams that are loaded with logs and stumps.

“We’re not in danger of putting too much wood in the streams,” Hennick observes. “In the early days when the salmon were thick, it appears that as much as a quarter of the stream surface was covered with fallen trees.”

To contact this area’s Washington Dept. of Fish and Wildlife biologist call their Mill Creek headquarters: (425) 775-1311.



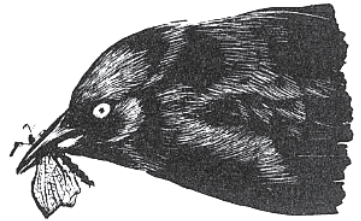
photo by Casey Dougherty

Go natural with the lawn

Pesticides used to kill pests and to eliminate weeds can harm pets and people—especially children. Reducing or eliminating pesticide use by improving soil health and by following the principles of natural yard and lawn care, will help you reduce or eliminate your pesticide use. To learn more about practicing natural yard care, visit the web site of the King County Solid Waste Division at <http://www.govlink.org/hazwaste/house/yard/> or contact the Natural Lawn and Garden Hotline at (206) 633-0224 or e-mail: info@lawnandgardenhotline.org.

Make yourself heard

Question, promptly and loudly, public policies that allow the filling or draining of wetlands or their buffers, the grading of steep slopes, or the removal of large trees. Lake Forest Park and King County are cited as models of environmental ethics in today's land use actions, but their policies are often controversial. Also, they can't be alert to all that's happening on our changing landscape. **All local governments count on citizens to sound the warning when violations occur.**



A walk in the Park

You may want to explore Lake Forest Park on foot. There are some charming street walks and bird watching sites along the leafy streams and roads and in our parks. The Urban Forest Task Force of Lake Forest Park has compiled an impressive comprehensive publication called “Tree Walks of Lake Forest Park”, focusing primarily on the spectacular trees here in our forested city. You may access it at the City’s website, www.cityofflp.com, and it is also in print, available at City Hall. There, too, you can pick up a map guide called “In Motion in Lake Forest Park”. It’s a map which shows accessible walking routes and contains other information about our city.



photo by Casey Dougherty

Blue Heron Park provides shade and food for young salmon on their way out, and gravel spawning beds for adult salmon coming home.

Parks, more parks, we always need more parks:

For all its leafiness and great, green vistas, Lake Forest Park has historically been short on public parks. That's changing fast, thanks to cutting edge work by the Stewardship Foundation, supported by hard working city staff and City Council members. Exciting changes have occurred since the first edition of this book was published six years ago. We offer, happily, this updated list of public parks and open spaces.

1) Grace Cole Nature Park: Over Fourteen acres of lush, green solitude. The park offers low-impact uses such as hiking, bird watching, and "outdoor classroom" nature study by schoolchildren. It's an amazing little island of wildness that somehow was missed by the 20th Century's grading and paving, but not by the logging. 28th Avenue NE, which leads to this park cuts right through the wetland, and long-time residents say a portion of it rests on the original cedar logs laid down in the marsh to provide access for cutting the cedars and other big trees of which there then seemed an endless abundance.

The history of Grace Cole Nature Park could be a model for overcoming hostility between citizens and their local governments, to produce something worthwhile. In the summer of 2000, the Lake Forest Park Stewardship Foundation went to court to challenge development on meadows described by the Army Corps of Engineers and the State Dept. of Ecology as wetland and wetland buffers. After the potential developers withdrew their requests for favorable action by the City, the Foundation worked with city staff and City Council to obtain grant money for purchasing the property. A state appropriation, secured by State Sen. Darlene Fairley, along with other available funds, plus an earlier land gift arranged by the late and much loved State Representative Grace Cole, formed a gem of wooded meadows, steep bluffs, spring fed ponds, and the beginnings of Brookside Creek. The city and the Foundation organize work parties throughout the year, removing briars and ivy to plant native shrubs and groundcovers. The park will include seasonal ponds, vegetated with native wetland plants. They'll be designed to attract native amphibian populations known to be nearby. A new ADA board walk and parking area help you to enter the park's two access points from 30th Avenue.

In addition, the Stewardship Foundation has taken on the task of restoration of Brookside Creek as Coho salmon waters. For more on this daunting and immensely gratifying project, see page 10.

2) Lyon Creek Nature Preserve: In 1998 the City of Lake Forest Park bought a one-acre parcel at the mouth of Lyon Creek, next door to the Civic Club. The idea was to give the city its first public access to Lake Washington, and develop a strong voice in the future upland uses of the creek. The property has been thoroughly re-landscaped with intense plantings of native trees and shrubs and a viewing platform over the creek. A pier extending over the lakeshore is preserved. It's a tranquil hideaway and a fine spot for a small family picnic. There's handicapped parking only on the site; other users are expected to leave their cars across the street near city hall. The Lake Forest Park Youth Council, students from Shorecrest High School, has adopted the Preserve and holds monthly work parties to weed and maintain it.

3) Pfingst Animal Acres Park: A shady and fish-bearing reach of McAleer Creek runs through this four acres of meadow and tall, arching trees. There are picnic tables, a children's garden and a walking trail. A salmon-viewing platform overlooks a riffle where, if you're lucky, you can watch the spawning ritual of Sockeye salmon. The park's at the corner of Brookside Boulevard and 178th Street, across from the Presbyterian Church.

4) Eagle Scout Park: A tiny neighborhood pocket park with exercise equipment, across from Animal Acres.

5) Blue Heron Park: It's a one-third acre jewel at the busy intersection of Hamlin Road, Brookside Boulevard, and Bothell Way. It is being refurbished with help from the City of Lake Forest Park, the Stewardship Foundation's Good Stewards Program, garden clubs, and scores of local volunteers. Here McAleer Creek winds through a thick grove of alder, cottonwood and poplar trees. It serves as a demonstration garden of native plants. A fine spot to meditate in summer and watch for salmon in late autumn.

6) Horizon View Park: This is Lake Forest Park's most active park, in the hilly, scenic northeast section of the city near 198th Street and 47th Avenue. It's been given a major facelift since our book's first publication in 2001. The renovated, six and one-half acre park includes playground equipment, a playfield, basketball half-court, tennis courts, picnic tables and a walking trail.

Getting involved

Our city depends heavily on volunteer commissions to help make decisions affecting the environment. These commissions are official agencies of city government. They advise the Mayor, City Council, and city staff. Each has nine members, appointed by the Mayor and approved by the City Council. They offer a great way for you to become directly involved in policies that affect the future of streams, wetlands and parks. To contact any members of the city commissions, leave a message at Lake Forest Park city offices, 206-368-5440.

- **Planning Commission**

Makes key decisions concerning the size, shape, appearance and character of the city. Develops land use policies which – when adopted by the City Council – become the road map for growth and change. One set of state regulations requires making room for population growth; another requires protection of natural assets. The Planning Commission has to find a balance between these conflicting goals while honoring the community's preservationist traditions. This is one of the most demanding and most gratifying of citizen volunteer activities.

- **Environmental Quality Commission (EQC)**

Recommends policies and actions to the Mayor, City Council and staff on a wide range of natural resource issues. This volunteer agency is the first line of protection for streams, wetlands, bluffs, water and air quality.

- **Parks and Recreation Commission (PRC)**

This volunteer group of citizens plays a strong role in forming park policy and overseeing the city's management of recreation programs, parks and open space. For example the PRC and EQC jointly developed the city's cutting edge Integrated Pest Management policy against pesticide and herbicide spraying in public areas. They helped Lake Forest Park become the first in King County to be named an "Earth City" in recognition of its efforts to protect the natural environment.

And you...

If you'd like to serve on one of the city's commissions, write to the mayor expressing your interest. Include any pertinent background that makes you suitable for the job. The letter will be held on file for reference when an opening occurs. Commission members are chosen by the mayor and approved by the city council.

Great ways to get your boots muddy:

StreamKeepers

An organization of volunteer citizens, StreamKeepers works with the Environmental Quality Commission to monitor and improve the health of local streams. It measures water quality and undertakes stream restoration projects (such as the rerouting and "daylighting" of Hillside Creek from a culvert to an open stream near Brookside School). Currently StreamKeepers is performing studies of the insect, larvae and worm populations, essential to knowing the true health of the streams and their capacity to support salmon. To get involved call the City at 368-5440.

Salmon Watcher Program

There may be far more salmon (wouldn't that be nice) or far fewer in our streams than we know. There are great gaps in the fish-census programs carried on by King County's Department of Natural Resources. The work is simple and pleasant: you choose sites along the two major creeks or their tributaries and watch for fish during fall salmon runs. King County Department of Natural Resources offers training and gratitude. Call (206) 263-6533 or access at Salmon-Watcher@metrokc.gov

Good Stewards Program

In cooperation with the National Wildlife Foundation (NWF), the Good Stewards program encourages the creation of wildlife habitats in back yards, in parks, on school grounds and at business properties. Habitats that meet standards are certified by the Good Stewards and marked with plaques from the NWF. Good Stewards founder, Libby Fiene, has led the effort, and the city has now met the requirements to be declared a Community Habitat, one of the first nationwide! Residents are encouraged to enroll their own yards and help to enhance our areas hospitality to wildlife. To enroll, call Libby at (206) 361-7076.

How your donations are used....

One hundred percent of your contributions are dedicated to ensuring the sustained ecological health of our community. As our city's environmental caretaker we believe we owe it to the generations to come to pass on a natural environment that is better than we found it. In recognition of this commitment, the Stewardship Foundation was recently honored by the City when we received their first ever ***Lake Forest Park Environmental Legacy Award***.

As the publishers of this booklet are always in need of volunteers to work on the protection and improvement of our parks, waterways, wetlands, fish and wildlife and to serve on the organization's Board of Directors. There's plenty to do, from digging and planting to event planning or envelope-stuffing and stamp-licking. Rewards include dirty hands, sore muscles, good food, new friends, and a sense of having helped shape the future of our very special community. If you have a suggestion for, or wish to head up a program which would make our City better, we'd like to hear from you.

Here's some of what we've done, in addition to the stream projects described previously:

- Purchased "salmon savers," storm water filters that screen out pollutants before they reach McAleer and Lyon Creeks.
- Provided seating benches at key resting points along favored walking routes in Lake Forest Park.
- Funded a replacement refrigeration unit and pump for the salmon-hatching and rearing equipment at Brookside Elementary School.
- Paid for the "Salmon Crossing" signs that mark stream crossings throughout Lake Forest Park.
- Donated equipment needed by StreamKeepers in its new assignment, monitoring macro-invertebrates in the Lake Forest Park creeks.
- Raised thousands of dollars at our annual fund-raising dinner and auction, to send 18 Shorecrest High School students to the North Cascades Institute's 10-day environmental study camp at Ross Lake.
- Provided scholarships, as needed, to Lake Forest Park Elementary 5th grade students to attend a 3-day outdoor experience at Olympic Park Institute.
- Developed the Good Stewards program, in conjunction with the National Wildlife Federation, to create wildlife habitats on residential, school and business property throughout the city- "*one yard at a time*".
- Monitored growth and development decisions in our own city and worked with citizens and organizations in adjacent cities. Our goal is to make certain that municipal government actions match environmental policies, and that development work meets the standards required to protect our streams, wetlands, erosion-prone bluffs and scenic landscapes. We take the lead assuring citizens have the opportunity to be involved in forming and enforcing legally-required comprehensive land use plans. We are not opposed to growth, but we call for sustainable policies that will ensure the integrity of our fragile natural resources.

Please join us. Call (206) 361-7076, and visit our website at www.lfpsf.org, for ways to get involved.

Blowing the whistle:

Stream and wetland protections fall mostly under the jurisdiction of the Washington Department of Fish and Wildlife, but it's up to citizens to find and report violations. If you see what seems to be a pollution incident, illegal dumping in or near a stream, an apparent fish kill, or any other event having to do with the health of streams and lakes, call the Department of Fish and Wildlife Emergency Hotline: (360) 902-2537. The Department of Ecology shares enforcement of water quality regulations; you can call them at (425) 649-7000 or after hours and on weekends, at 1-800-258-5990.

If you witness topping of trees, or clearing of land in a sensitive area (steep slopes, wetlands, or close by such areas), or cutting/clearing anywhere without a City permit, call LFP police 364-8216. On a weekend, call 911 to report such infractions.

Preserving the common wealth

Since our earlier edition in 2001, Lake Forest Park has upgraded and expanded its laws and regulations aimed at preventing mistreatment of streams, wetlands and steep slopes. These are called Sensitive Areas Ordinances (SAO's) in LFP. King County calls their laws Critical Areas Ordinances (CAO's), but they mean the same thing.

These SAO's and CAO's require undisturbed natural buffers, separating wetlands, streams and steep slopes from any grading or land development. The size of those buffers can vary, depending on the size and quality of the wetland or stream. The City Planning Department has printed information available which clarifies the degree of protection required for streams, wetlands, steep slopes and hazard areas. This information is also available on line: www.cityofflp.com

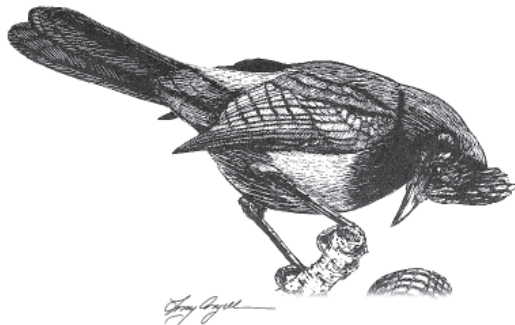
Much of the development in this city took place before the current codes were adopted. For that reason, you will see homes, businesses and parking lots which exist quite legally, adjacent the streams and wetlands. They were approved before local governments became conscious of what damage they were condoning by permitting development in or directly next to these fragile landscapes. New developments must adhere to the *new* measures.

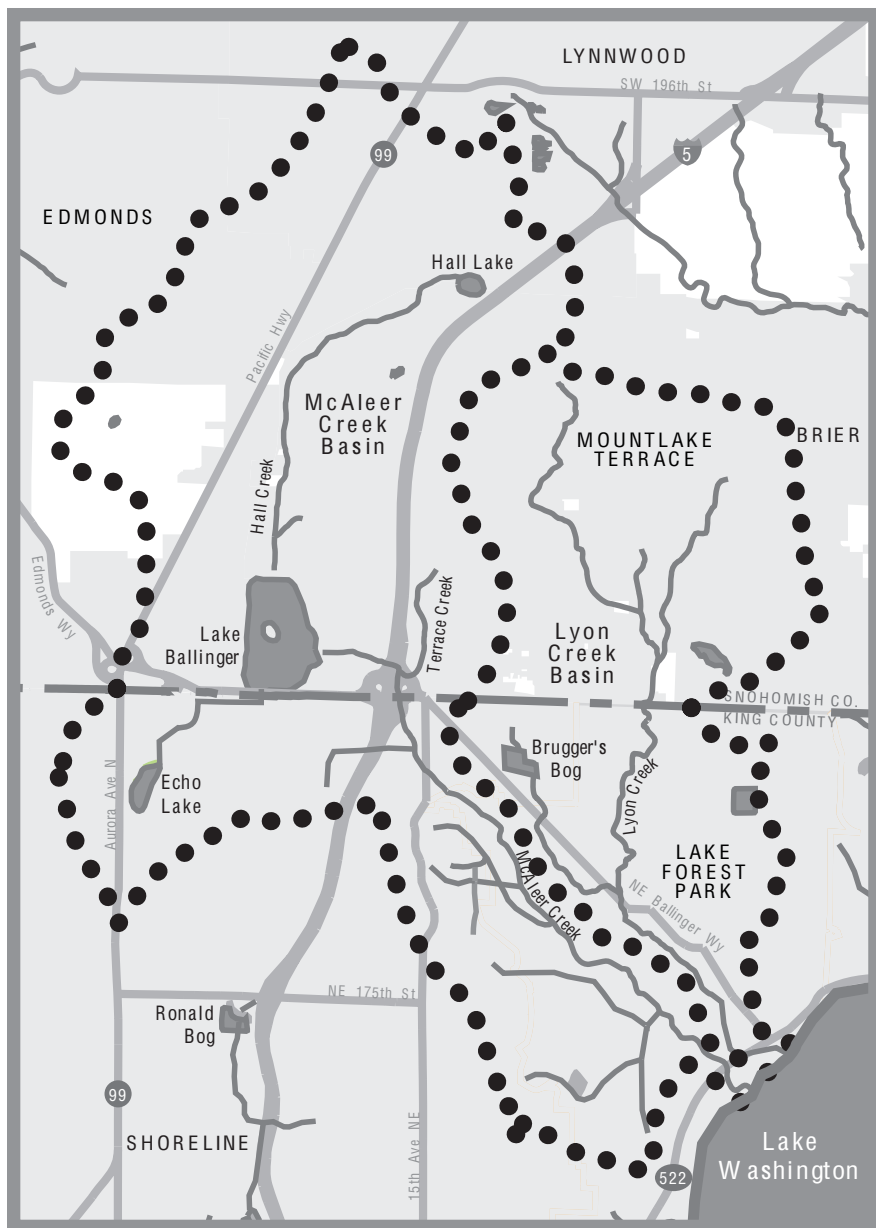
Please keep in mind that our city depends upon its citizens to spot apparent violations of the SAO's and report them to city hall at (206) 368-5440. Ask for the planning department. On weekends, call 911. (Yes, it's really OK!)

The Urban Forest

For obvious reasons, forested landscapes are of great concern in Lake Forest Park. One of the more progressive and controversial city ordinances requires you to obtain a permit before cutting what the city calls “significant” trees. You can pick up Customer Information bulletins at city hall, for details on what you can remove and what you can’t. The tree ordinance and other actions won Lake Forest Park a “Tree City” award from the Washington Dept. of Natural Resources in 2004 and 2005.

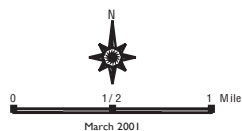
(Another way to find city codes for all areas of governance on the web: find www.mrsc.org and click on “database search” to bring up municipal codes; then scroll to Lake Forest Park).





McAleer Creek and Lyon Creek Basins

- ● ● Basin Boundary
- ~ Stream
- Lake
- Wetland
- Incorporated Area



Map produced by:
GIS & Visual Communications Unit
King County Dept. of Natural Resources
0103LFPmap WVC

About fins, feathers and foundations

The Lake Forest Park Stewardship Foundation, who produced this booklet for the first time in 2001 and updated it in 2007, needs your help. If you haven't already done so, we urge you to fill in the enclosed form and mail it with your contribution. We receive grants and other priceless help from larger organizations friendly to what we're trying to do. But mostly we depend on our members' generosity, time and muscle to advance the cause of stream restoration, park improvement, woodland and slope protection, and the endless list of projects that come with those goals.

We'll be forever grateful to the King County Department of Natural Resources and Parks whose generous grant helped pay for the printing of this updated version, and to the Northwest Fund for the Environment, who helped pay for the first publication.

We've had irreplaceable help from the citizens who govern and administer our amazing little city; and from the wise, energetic efforts of StreamKeepers, the Environmental Quality Commission, Parks and Recreation Commission, Washington Toxics Coalition, National Wildlife Federation, Adopt-A-Stream, the Seattle Audubon Society, youth organizations and the students and faculties of the Shoreline School District. We may have overlooked some organizations who helped. Our apologies, and sincere thanks.

Thanks also to Tony Angell, artist, sculptor, author, educator and inspiration, for allowing us to decorate the book with his art images. To Casey Dougherty for his splendid photographs. To Vicki Stiles of the Shoreline/Lake Forest Park Historical Museum, for leading us to stories we never would have found. To John Clayton and Bill Schoening for personally guiding us through the history of our creeks. To Bill Bennett and Frank Zenk for proofing the original maps and narrative. Any mistakes are ours, not theirs.

Thank you for taking time to read our guidebook and for becoming involved in the future of your city. We do believe this is an extraordinary place to live. With enough passion, wisdom and luck we can keep it that way- for you and for future generations.





**The Mission of the
Lake Forest Park Stewardship Foundation is:**
To contribute to the well-being of our community
by fostering awareness, appreciation and
stewardship of our natural resources, and by
preserving and enhancing parks and open space in
Lake Forest Park.

Learn more about the Lake Forest Park
Stewardship Foundation and its many activities at
our web site, www.lfpsf.com.

Or call the Foundation's message number,
(206) 361-7076.