

CHAPTER 6

GUIDANCE FOR DEVELOPERS

6A. HOW TO PLAN YOUR STREAMSIDE PROJECT

The purpose of this chapter is to help you, as a developer planning a project on streamside land, to anticipate the special needs inherent in planning and building residential, commercial or industrial projects on streamside properties.

6B. THE IMPORTANCE OF PROTECTING AND MANAGING LOCAL STREAMS

The streams and rivers that helped form the picturesque Santa Clara Valley are an integral part of the natural beauty of the region. Early land development in the Santa Clara Valley often maximized lot yield by placing the back fences of individual lots directly onto streambanks. This restricted access to streams, reduced the value of stream-related open space to the community, degraded water quality, damaged streams and streamside resources and limited design options for flood protection measures. Some streams were redesigned to be straight, smooth, and efficient drainage ways, sometimes lined with concrete. These sterile waterways were

often hidden from view, and hence became perfect corridors for illegal and disruptive activities. It doesn't have to be this way.

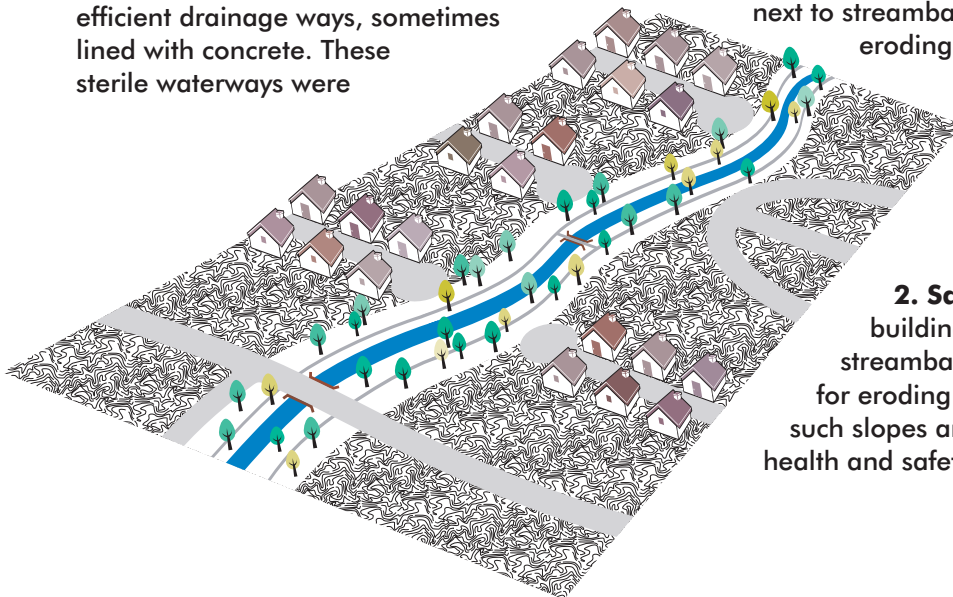
Today, the community's desires for open space and recreational opportunities, state and Federal mandates to protect water quality and endangered fish, such as salmon and steelhead, combined with the Santa Clara Valley Water District's preference for non-structural, natural flood protection methods, create the opportunity for streamside development which both preserves the natural values the public desires and provides the security and privacy residents need.

6C. BENEFITS OF INTEGRATING STREAMS INTO YOUR SITE PLANS

By integrating measures to protect and/or restore streams and streamside natural resources into your development plans, you can create these benefits:

1. Safe Structures: By not building on or next to streambanks the potential for eroding and destabilizing such slopes, impacts to health and safety and related liability are reduced.

2. Safe Slopes: By not building on or next to streambanks the potential for eroding and destabilizing such slopes and related impacts to health and safety are reduced.



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3. **Stream Stability:** By not placing structures between stream banks, and by reducing the amount of pavement and other impervious surfaces adjacent to a stream, including directing drainage from roofs, driveways and patios away from streams, you will be contributing to stream stability.
4. **Open Space and Recreation:** healthy and intact stream ecosystems are a ready-made open space area that can be incorporated in your landscape design and site plan.
5. **Buffers Between Structures:** by preserving and maintaining riparian trees and other vegetation, and siting structures appropriately, you can maintain or create a visual and physical buffer between structures on a site, and between structures on a neighboring site, adding to the privacy and enjoyment of your development.
6. **Proactively Meeting Requirements:** by protecting streams and streamside resources by integrating them into your plans for development, as you follow the Guidelines and Standards for Land Use Near Streams (see below), you will lay the foundation for meeting State or Federal requirements you may encounter when developing streamside lands.

6D. BASE YOUR SITE PLAN ON LOCAL STREAM RESOURCE CONDITIONS

It is very important, given the dynamic and changing nature of streams and stream ecosystems, that each phase of your project and site planning process take into account the special conditions that exist on streamside properties. Your project and site planning process should include measures designed to:

1. **Prevent Damage:** in designing your project, consider how best to protect and prevent damage to sensitive stream resources, and prevent future damage to structures and their occupants.
2. **Address Specific Problems:** if specific problems exist on a site, such as streambed or streambank erosion, a barrier to fish passage, untreated surface drainage flowing directly into a stream or a degraded riparian corridor, your site plan should address each problem with a specific solution.
3. **Anticipate the Needs of Dynamic Stream Systems:** streams are dynamic; they can vary seasonally and from year to year, based on periodic high flows, floods and wet and dry cycles that can occur over a period of years. It is essential that you keep the theme of 'flexibility' in mind when you devise methods of protecting streamside resources or repairing streamside problems. Keep in mind the dynamic nature of stream systems as you plan and carry out your development project.

Please consult with planning or building officials in your community to find out how the Guidelines and Standards apply to your site.

6E. THE GUIDELINES AND STANDARDS FOR LAND USE NEAR STREAMS

The Santa Clara County Water Resources Protection Collaborative, whose members include all of the cities in Santa Clara County, the County, the Santa Clara Valley Water District (SCVWD) as well as environmental, business, agricultural and community organizations, has undertaken a multi-year cooperative process to develop the Guidelines and Standards for Land Use Near Streams, which are listed in Chapter 3 of this User Manual, and the companion Permitting Tools, which are in Chapter 2 of this User Manual.

While each community will decide how and the Guidelines and Standards (G&S's) are administered, each City and the County is expected to require that the G&S's be met when developing streamside properties.

6F. GOALS OF THE GUIDELINES AND STANDARDS AND PERMITTING TOOLS

The Guidelines and Standards and Permitting Tools have been designed to provide:

- **Certainty and clarity in development standards:** the Guidelines and Standards have been developed so that each local permitting agency will apply them in a similar manner countywide. The actual Guidelines and Standards have been peer reviewed by planning and public works staff to help ensure clarity and consistency.
- **Predictability:** the Guidelines and Standards are available for you to review and examine, so you can predict how they will likely apply to your proposed project.
- **Permit Streamlining:** the Guidelines and Standards are designed to fit into each local jurisdiction's existing planning, building and permit systems, to streamline permitting.

- **Proactivity:** by reviewing the Guidelines and Standards as part of your preapplication process, you can see how they apply to your proposed project, so that by the time you file out a permit application, related requirements of the local permit agency are already integrated into project planning, and eventually, into your site plan.

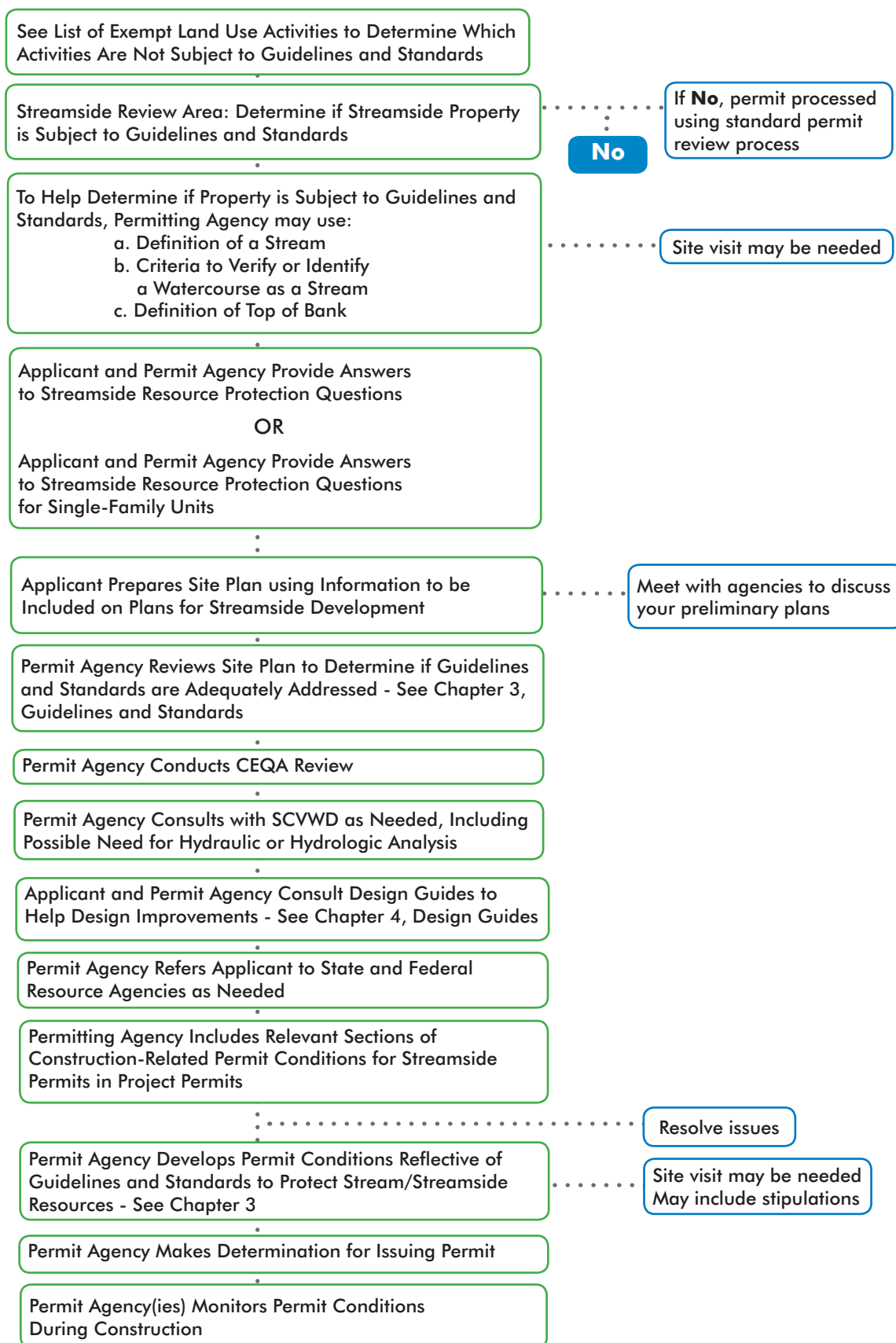
6G. PROJECT PLANNING TIPS

To facilitate the planning of your proposed project, and the processing of related permits, consider these tips:

- **Start Early:** leave plenty of time to understand the Guidelines and Standards and to develop alternate site plans and development scenarios for project site. Allowing plenty of time for this phase of project planning will bear fruit later in the planning and permit process.
- **Develop a Preliminary Plan:** sketch a simple preliminary site plan, with proposed improvements showing specifically how the Guidelines and Standards will be applied.
- **Answer the Streamside Resource Protection Questions:** if you fill out the Streamside Resource Protection Questions you will quickly gain valuable knowledge to apply to your project and site planning.
- **Contact State and/or Federal Permitting Agencies:** if your proposed development activities include alteration of a stream channel or development next to a stream which contains threatened or endangered fish, such as salmon or steelhead, or similar terrestrial or aquatic life, contact the California Department of Fish and Game, the U.S. Fish and Wildlife Service, etc. See the Resource Agency Referrals for Streamside Development in Chapter 2, Section K of this User Manual for contact information as well as the type of issues in which resource agencies are interested.

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STREAMSIDE PERMIT REVIEW PROCESS FLOW CHART



- **Be Flexible:** if your preliminary development plans do not meet the needs of a permitting agency, be creative to find another way to meet these needs.

- **Market Your Success:** by protecting and enhancing local stream and streamside resources by integrating the Guidelines and Standards into your development plans, you will help create greater environmental and community values within your project. Tell potential buyers or tenants of this benefit.

6H. HOW TO USE THE STREAMSIDE PERMITTING TOOLS AND THE GUIDELINES AND STANDARDS FOR LAND USE NEAR STREAMS

Chapter 2 of this User Manual contains all of the Permitting Tools that accompany the Guidelines and Standards. Please review the Flow Chart to get a sense of which Permitting Tools you should use to help you step through the streamside permitting process as easily as possible. The following discussion will take you through the streamside permit application process in a step-wise manner.

Step 1: Land Uses That are Subject to the Guidelines and Standards: the following list of land use activities are exempt from the Guidelines and Standards. All other land use activities are subject to Guidelines and Standards.

List of Exempt Land Use Activities

- Less than 3 cubic yards of earthwork; or,
- Interior building construction and alterations; or,
- Erection of storage buildings not greater than 120 sq. ft.; or,
- Replacement of sewer or water laterals; or,

- Re-roofing; or,
- Wood fences six feet and height or less; or,
- Exterior decks less or equal to 30" above grade.

Interior construction (b), replacement of sewer laterals (d), and reroofing are subject to local building permit requirements. In most jurisdictions minor grading (a), small storage buildings (c), fencing (f) and low decks are not subject to building permits. However, if you do plan on adding a storage shed, a fence or a deck, please consider how to design, site and build them in a manner that causes the least disruption to the stream and streamside resources. Decks should not overhang or extend beyond the creek bank. Fences should also be set back from the top of the bank.

Step 2: Determine whether or not your parcel is defined as a streamside parcel. If any portion of the parcel is within 50 ft. of the top of the streambank on or nearest to your parcel, the answer is 'yes'. See the following sections in Chapter 2, of this User Manual for reference material to help determine if your parcel is defined as a streamside parcel:

- 2D. Designation of Streamside Review Area
- 2E. Definition of a Stream
- 2F. Criteria to Identify or Verify a Watercourse as a Stream
- 2G. Definition of Top of Bank

Step 3: See the list of Streamside Resource Protection Questions, Chapter 2, Section H in this User Manual.¹ Answer the questions to the best of your ability. If you need help answering any of the questions, consult with your project planner, engineer, architect or local building/planning department.

¹ Your local building department may use this same list of Questions, or may have changed their format by adding them to an existing permit questionnaire. Either way, completing the Questions will help provide information helpful to building on a streamside lot that causes the least disruption to the stream and streamside resources.

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Step 4: See the Information to be Included on Plans for Streamside Development, Chapter 2, Section J in this User Manual. By including the information described, you can create a site plan which integrates the stream and streamside resources into your building plans. The Streamside Resource Protection (see Step 3 above) will provide the basis for much of the information you will need to include on the site plan.

Step 5: See the Guidelines and Standards for Land Use Near Streams, Chapter 3, Section B of this User Manual. Review the Guidelines and Standards, starting with section I, Riparian Corridor Protection, and proceeding to section XIV, Flood Protection. Determine how you will incorporate the Guidelines and Standards into your development plans to protect stream and streamside resources.

Model Enhanced Practices

The Santa Clara County Water Resources Protection Collaborative has developed a set of Model Enhanced Practices, which build on the basic Guidelines and Standards. If you want to go beyond the basic Guidelines and Standards and provide additional protection and/or restoration of a stream or related streamside resources, please see the Model Enhanced Practices in Chapter 6 of this User Manual and see how they can be used to add environmental and community benefit to your development.

6I. PERMITS AND GUIDANCE BY STATE AND/OR FEDERAL REGULATORY AGENCIES

Depending on the location of your proposed project and the potential for it to impact natural resources, such as wetlands and protected fish, wildlife or plant resources, you may need to obtain permits from one or more State or Federal agencies, such as the California Department of Fish and Game, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service or the San Francisco Bay Regional Water Quality Control Board. If you need to obtain permits from more than one of these agencies, you may elect to complete a single Joint Aquatic

Resources Permit Application (JARPA) which is then reviewed by the relevant State and Federal Permit Agencies. If you think you will need permits from any of these agencies, you should talk to their staff representatives as early as possible in the permit process. Please see Chapter 2 Section K for a referral list to Resource Agencies.

Step 6: See the Construction-related Permit Conditions for Streamside Permits, Chapter 2, Section L of this Users Manual, for ways to protect stream and streamside resources during the construction phase of your project.

6J. PERMITS AND TECHNICAL ASSISTANCE FROM THE SCVWD

If your project is adjacent to a SCVWD facility or right-of-way, or if your local jurisdiction has chosen not to administer streamside permitting, a SCVWD permit is required. Please contact the SCVWD's Community Projects Review Unit at (408) 265-2607, ext. 2650 to find how to obtain a SCVWD permit. Information is also available at: http://www.valleywater.org/Business_Info_and_Permits/Permits/index.shtml

Use of the Santa Clara Valley Water District's (SCVWD) Website for Streamside Information

The SCVWD, in cooperation with the Santa Clara County Water Resources Protection Collaborative, has established a website to support the implementation of the Guidelines and Standards. You may find it useful to use the website to access information, including GIS-based maps of the Santa Clara Valley, to help plan your streamside project. See Chapter 9 of this User Manual for more information about the website and how to access it.

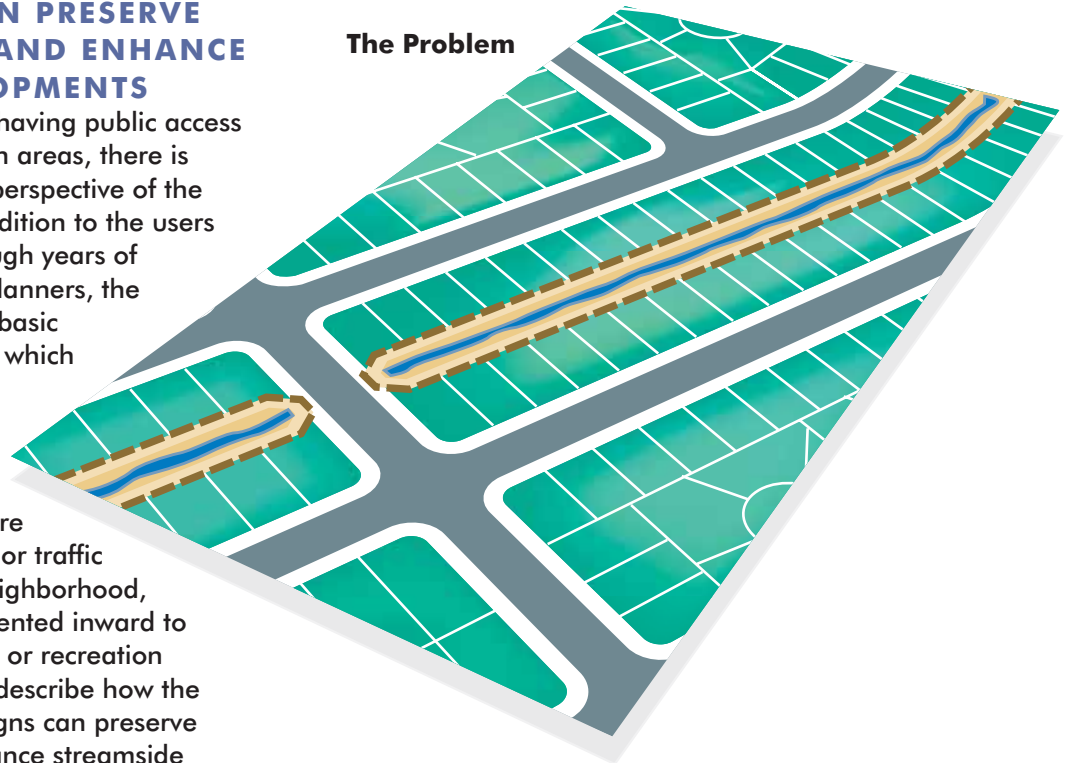
Please consult with planning or building officials in your community to find out how the Guidelines and Standards apply to your site and your project.

6K. STREAMSIDE PLANNING: HOW USING ALTERNATIVE STREET DESIGNS CAN PRESERVE NATURAL STREAMS AND ENHANCE STREAMSIDE DEVELOPMENTS

When there is an interest in having public access to stream-oriented recreation areas, there is also a need to consider the perspective of the adjacent homeowners, in addition to the users of the parks and trails. Through years of working with development planners, the SCVWD has identified three basic street alignment alternatives which can enhance the interface between homes and a linear stream park, trail facility or flood protection channel. These alignments are most effective where the major traffic is on the perimeter of the neighborhood, and residential areas are oriented inward to a central linear park, school, or recreation facility. The following pages describe how the use of alternative street designs can preserve our natural stream and enhance streamside developments.

Housing developments that are designed with the back fences along a stream bank isolate that waterway from the rest of the community instead of integrating it into the neighborhood. Such a design allows the stream to become a detriment to the area, instead of an asset. This type of plan tends to hide the stream from view, restricts access to it, and makes flood protection projects difficult to design.

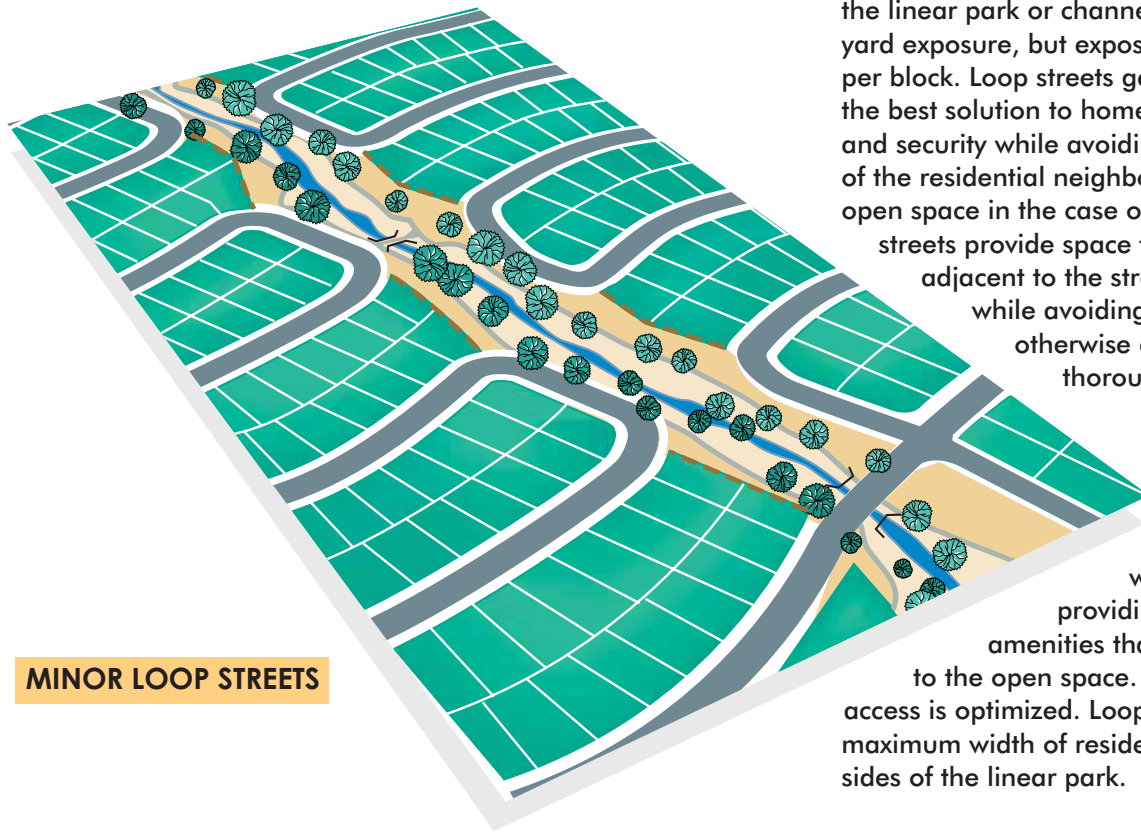
The Problem



CREEK BETWEEN BACKYARDS

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The Solutions

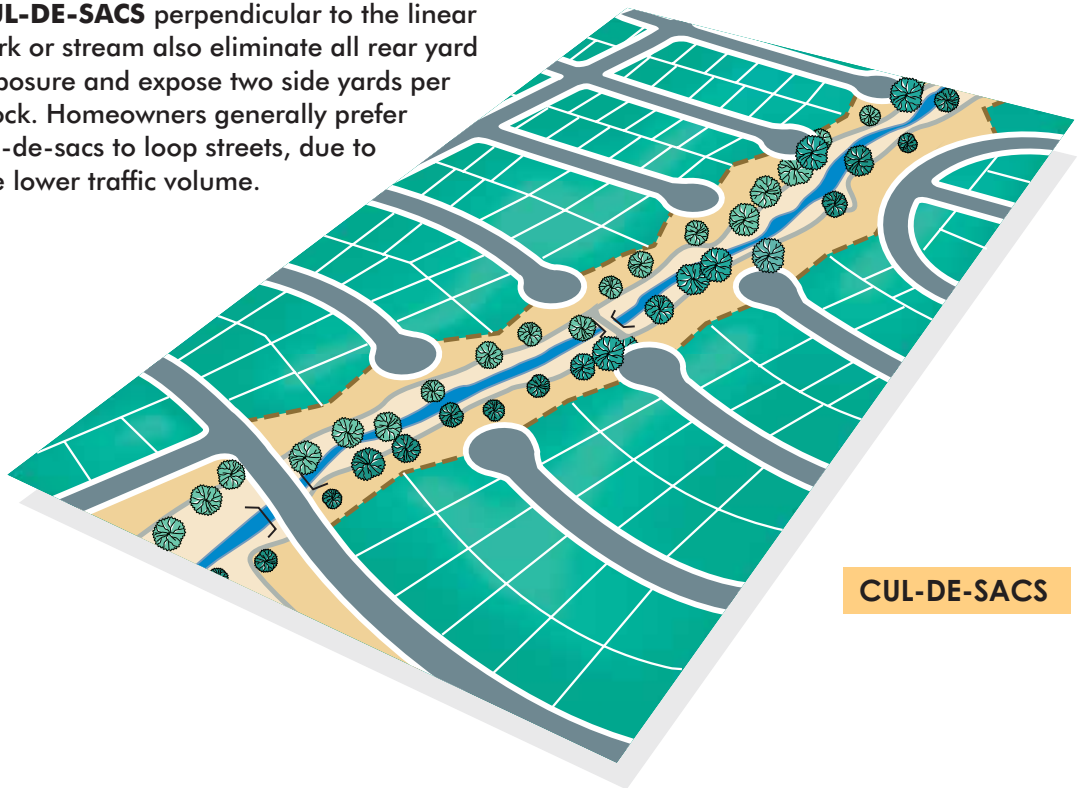


MINOR LOOP STREETS

MINOR LOOP STREETS perpendicular to the linear park or channel eliminate all rear yard exposure, but expose two side yards per block. Loop streets generally provide the best solution to homeowner privacy and security while avoiding a separation of the residential neighborhood from the open space in the case of linear parks. Loop streets provide space for public parking adjacent to the stream park chain while avoiding through-traffic otherwise created by a major thoroughfare.

Loop streets allow a more attractive development with regard to providing open space amenities than streets parallel to the open space. Visual and physical access is optimized. Loop streets also allow maximum width of residential area on both sides of the linear park.

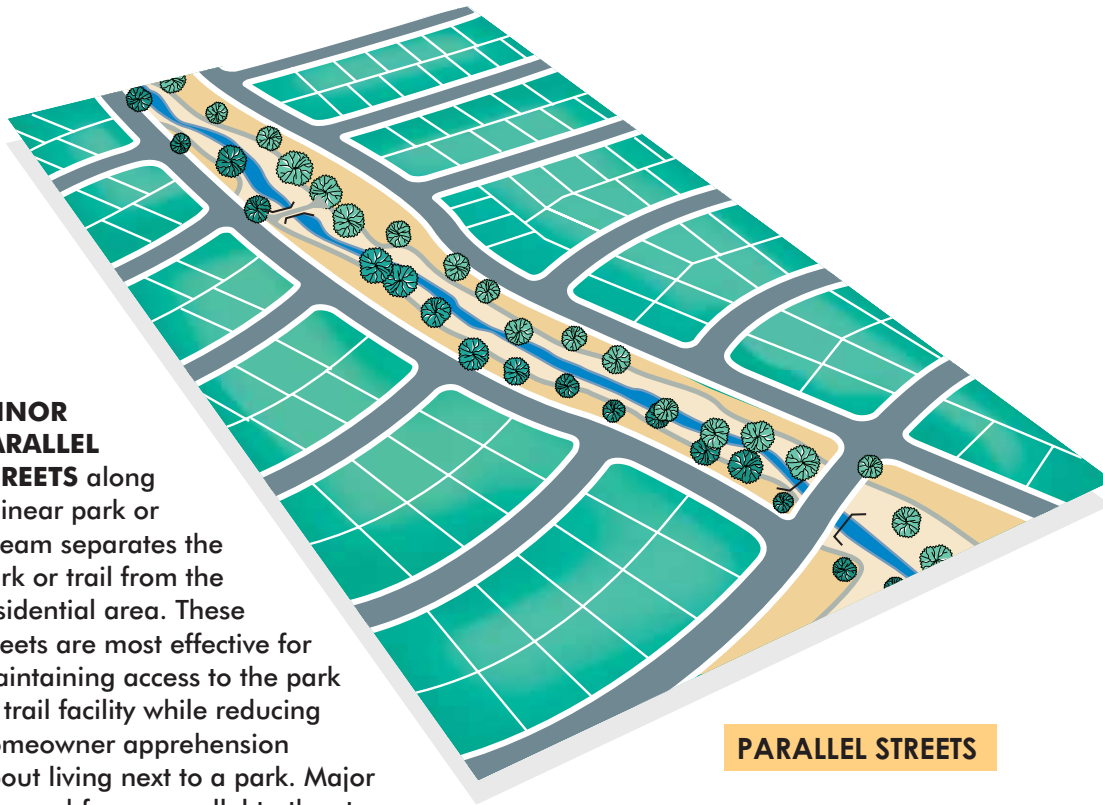
CUL-DE-SACS perpendicular to the linear park or stream also eliminate all rear yard exposure and expose two side yards per block. Homeowners generally prefer cul-de-sacs to loop streets, due to the lower traffic volume.



CUL-DE-SACS

**The Solutions
(continued)**

MINOR PARALLEL STREETS along a linear park or stream separates the park or trail from the residential area. These streets are most effective for maintaining access to the park or trail facility while reducing homeowner apprehension about living next to a park. Major thoroughfares, parallel to the stream, tend to isolate the neighborhood from the open space.

**PARALLEL STREETS**