

## 7.3 STORM WATER DRAINAGE

This section evaluates the storm water drainage impacts associated with the proposed plan, including whether the proposed plan will: (1) substantially alter the existing drainage pattern of the area resulting in substantial erosion or siltation; (2) substantially increase the rate or amount of surface runoff in a manner which would result in flooding; (3) create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems; or (4) require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Water quality and flooding impacts are evaluated in Sections 5.1 and 8.5, respectively.

This section is based, in part, on the 2007 City of Fortuna Background Report, Section 7.4, Storm Water Drainage. The Background Report is included as Appendix G of this PEIR.

### Environmental Setting

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The City of Fortuna storm water drainage system serves the incorporated City of Fortuna and environs (11,350 acres total). This consists of a downtown system, several peripheral subdivision systems and outlying rural systems. The downtown drainage system is composed primarily of reinforced concrete pipe (RCP) and corrugated metal pipe (CMP) with diameters ranging from 8-inches to 54-inches, with older box culverts and cross drains at intersections. The subdivision drainage systems are composed of RCP, CMP and polyethylene pipe with diameters ranging from 12-inches to 48-inches. The outlying rural systems are composed largely of roadside ditches and culverts. Storm water runoff from these systems flows by gravity into Rohner Creek, Hillside Creek, Strongs Creek, Jameson Creek, and Mill Creek before entering the main stem of Strongs Creek and discharging to the Eel River. Except for the lower reaches of Strongs Creek, which is partially channelized, Fortuna's creeks remain in their natural state. (City of Fortuna, 2005).

In anticipation of this General Plan Update, the City updated its Storm Drain Master Plan (2005). The Storm Drain Master Plan provides a detailed overview of the existing major storm drain facilities within each drainage basin, and provides recommendations for improving identified deficiencies in the City's storm drain system. According to the hydraulic analyses provided in City's Storm Drainage Master Plan, 79 drainage structures within the City are considered deficient (i.e. are undersized for the 25-year design flow and/or backwatered pipes which are causing or have the potential to cause flooding problems) (City of Fortuna, 2005).

Subsequent to the Storm Drain Master Plan, no significant storm drainage system improvements have been completed. However, the Fortuna Redevelopment Agency is planning to improve storm water facilities located outside the redevelopment area to benefit infrastructure within the redevelopment area.

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## Applicable Plans, Policies, Codes and Regulations

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### Federal

**Clean Water Act.** Adopted in 1972, the Federal Water Pollution Control Act, also referred to as the Clean Water Act (CWA), was amended to prohibit discharges of pollutants to Waters of the United States unless the discharge is in compliance with a National Pollution Discharge Elimination System (NPDES) permit. The 1987 CWA amendments added Section 402(p) establish a framework for regulating municipal, industrial, and construction storm water discharges under the NPDES program. In 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that identify application requirements for storm water permits for “small” municipal storm sewer system (MS4) dischargers (e.g., City of Fortuna), certain industrial facilities, and construction sites greater than five acres in size. In 1999, the US EPA published final regulations with additional storm water permit application requirements for MS4s and construction sites one to five acres in size. NPDES programs are administered in California by the State water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs).

### State

**State Water Resources Control Board.** Under the federal regulations, there are two options for permitting storm water discharges—individual and general permits. In California, the SWRCB elected to adopt general permits for municipalities, industrial facilities, and construction activities. The SWRCB also elected to have the nine RWQCBs in California provide local regulatory oversight of the NPDES general permit requirements.

**Regional Water Quality Control Board.** The North Coast RWQCB (Region 1) regulates three types of general NPDES permits within the Planning Area. These include the General Municipal Storm Water Permit (Water Quality Order 2003-005-DWQ, NPDES General Permit No. CAS000004); the General Industrial Storm Water Permit (Water Quality Order No. 97-03-DWQ, NPDES General Permit No. CAS000001); and the General Construction Storm Water Permit (Water Quality Order No. 99-08-DWQ, NPDES General Permit No. CAS000002).

### Local

**NPDES Municipal Storm Water Permit.** The City of Fortuna discharges storm water to the Eel River and is therefore subject to NPDES Phase II regulations as an MS4. The City holds a Phase II NPDES General Municipal Permit for these point-source discharges. The City’s Storm Water Management Program (SWMP), approved by the RWQCB in January 2006, was adopted by the City Council in March 2006. The SWMP defines six minimum control measures and corresponding Best Management Practices (BMPs) to be implemented over the five-year program. These include: (1) Public education and outreach; (2) Public involvement/ participation; (3) Illicit discharge detection and elimination; (4) Construction site storm water runoff control; (5) Post construction storm water management; and (6) Pollution prevention/good housekeeping for municipal operations. The SWMP is available online at the following web address: [http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/swmp/fortuna\\_swmp.pdf](http://www.swrcb.ca.gov/water_issues/programs/stormwater/swmp/fortuna_swmp.pdf)

**NPDES Industrial Storm Water Permit.** Several individual industrial sites located within the Planning Area are covered under the NPDES General Industrial Permit. The online industrial permit database was queried and identified these industrial sites in the Planning Area:

- Former (now vacant) lumber mill(1440 Newburg Rd)
- Eel River Disposal (965 Riverwalk Dr)
- Eel River Lumber Products (1053 Northwestern Ave)
- Hansen Truck Stop (2404 Sandy Prairie Rd)
- Mercer Fraser Plant A (81 Riverwalk Dr)
- Alton Processing Plant (Fowler Lane)
- PALCO Leland Rock Site (56157 U.S. Highway 101)
- Mercer Fraser Company (200 Dinsmore Dr)

**NPDES Construction Storm Water Permit.** The NPDES General Construction Permit requires storm water runoff control for construction activities on sites greater than five acres, and for small construction activities (land disturbance between one and five acres). Compliance with the general permit during construction activities requires the following:

- Developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) that specifies BMPs for preventing pollutants from contacting with storm water, runoff, and controlling erosion during construction activities;
- Eliminating or reducing non-storm water discharges to storm sewer systems or other waters of the U.S.; and
- Conducting BMP inspections; the City is responsible for implementing construction site runoff control inspections and post-construction storm water management as part of the Municipal Permit conditions.

The monitoring and reporting requirements for the general construction program also include sampling and analysis requirements for direct discharges of sediment to waters impaired due to sediment, and for pollutants that are not visually detectable in runoff that could cause or contribute to discharges that exceed the water quality objectives. Although discharges from construction activities are regulated under the General Construction Permit, the City of Fortuna is responsible for implementing construction site runoff control and post-construction storm water management as part of the Municipal Permit conditions.

**Fortuna Municipal Code.** The Fortuna Municipal Code (FMC) addresses storm drainage in Chapter 13.80 of Title 13, Utilities. The purpose of the FMC storm water provisions is to ensure the maximum beneficial public use of the City's storm water drainage facilities through the adequate regulation of use, construction, and maintenance; to provide for equitable distribution of the City's costs; and to provide procedures for complying with the requirements placed upon the City by other regulatory agencies (FMC Section 13.80.010, Purpose of Provisions).

FMC Section 13.80.100, Discharge of Pollutants, prohibits non-storm water discharges into storm drains unless the non-storm water discharge is in compliance with a NPDES permit issued for the discharge. FMC Section 13.80.130, Reduction of Pollutants in Urban Runoff, provides BMPs for construction activities to prevent the discharge of construction wastes or contaminants from entering the storm drains. The FMC also contains provisions for watercourse protection (Section 13.80.140), service billing (Section 13.80.060) and discharge violations (Sections 13.80.050 – 080).

## Methodology

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### Policy Background

The following policy background is used to assess the storm water drainage impacts of the proposed plan:

- Development within the Planning Area will occur according to the development estimates included in Section 3.1 of this PEIR. This will include the creation of impervious surfaces that will increase the volume of storm water runoff within and discharged from the Planning Area.
- Several storm drain systems within the Planning Area have known deficiencies described in the City's 2005 Storm Water Master Plan. The City will continue to update and implement this plan.
- The PEIR presumes continuation of the regulatory policies affecting storm water and non-storm water discharges that are currently in effect. Discussions within the state and federal regulatory agencies will continue; however, regulatory programs may change substantially becoming unpredictable during the time frame of this proposed General Plan.

### Thresholds of Significance

Implementing the Proposed General Plan could have significant storm water drainage impacts if it:

- Substantially affects the existing drainage pattern of the area by altering the course of a stream or river in a manner that results in substantial erosion or siltation on- or off-site;
- Substantially increases the rate or volume of surface runoff in a manner that results in flooding on- or off-site;
- Creates or contributes to storm water runoff that exceeds the capacity of existing or planned storm water drainage systems; or
- Requires or results in the construction of new storm water drainage facilities or the expansion of existing facilities, construction of which could cause significant environmental effects.

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## Implications of the Draft Land Use Diagram

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Proposed General Plan implementation has the potential to impact the Planning Area's storm drainage system. The potential impacts would be primarily derived from land use changes in what are now underdeveloped and/or underutilized areas. This is especially true of changes in land use within proposed Focus and Annexation Areas that could increase the volume of storm water runoff discharged into the existing municipal storm drain system.

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## General Plan Policy Response

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The proposed General Plan includes the following policies and programs relevant to the storm drainage system.

**Policy PFS-5.1 Dainage Facilities Maintenance.** The City shall require the regular inspection and maintenance of all drainage facilities, including detention basins and both natural and manmade channels, to ensure that their full carrying capacity is not impaired.

**Policy PFS-5.2 Natural Drainage.** The City shall encourage the use of natural storm water drainage systems in a manner that preserves and enhances natural features.

**Policy PFS-5.3 Adequate Drainage Facilities to avoid flooding.** The City shall ensure that adequate drainage facilities are provided in new development to adequately convey 25-year storm event runoff without on-site or downstream flooding.

**Policy PFS-5.4 Runoff Quality.** The City shall improve the quality of runoff from proposed new development through use of appropriate and feasible mitigation measures.

**Policy PFS-5.5 Surface Drainage.** The City shall require that new development have surface drainage disposal accommodated in one of the following ways:

- Positive drainage to a City-approved storm drain, stream, creek, or other natural water course; or
- On-site drainage that is retained within the development

**Policy PFS-5.6 Future Drainage Compliance.** The City shall require future drainage system to comply with applicable State and Federal non-point source pollutant discharge requirements.

**Policy PFS-5.7 On-Site Drainage Treatment.** The City shall implement on-site storm drainage treatment facilities in City projects wherever feasible.

**Policy PFS-5.8 Detention Facilities.** The City shall use storm water detention facilities to mitigate drainage impacts and reduce storm water drainage system costs. To the extent practical, storm water detention facilities should be designed for multiple purposes, including environmental, recreational, and/or storm water quality improvement and the City shall provide low impact development (LID) drainage models for private development to follow.

**Policy PFS-5.9 Hillside Erosion.** The City shall continue to collaborate with property owners in hillside areas to minimize erosion and conveyance into City drainage facilities.

**Policy PFS-5.10 Rainy Season.** The City shall prohibit grading activities during the rainy season, listed as October 15-April 30, unless a Winterization Plan has been submitted and approved by the City in conjunction with a grading permit application.

**Policy PFS-5.11 Fair-Share Costs.** The City shall require all new developments to pay their fair share of the cost of improvements in the Storm Drainage Master Plan.

**Policy PFS-5.13 Storm Drain Master Plan Implementation.** The City shall monitor the implementation of the Storm Drainage Master Plan as development occurs to ensure that the improvements are not being oversized or undersized.

**Policy PFS-5.14 Drainage Studies.** The City shall require site-specific studies including erosion control, watershed management, and flooding for all major developments that have the potential to create erosion, watershed, or flooding problems.

**Policy PFS-5.15 Drainage Easements.** The City shall require dedication of drainage easements included in the Storm Drainage Master Plan as a condition of approval for any subdivision or use permit.

**Policy PFS-5.16 County Developments.** The City shall monitor development in the County to ensure that drainage impacts from new projects do not impact the City's drainage system. If any impacts are projected to occur from developments in the County, the City shall require, as feasible, the County or developer to install adequate improvements to mitigate the anticipated impacts.

**Policy PFS-5.17 Vegetation Control.** The City shall strive to keep excessive brush and vegetation clear from hillside creeks to facilitate storm water drainage during heavy precipitation events.

**Policy PFS-5.18 Watershed Protection.** The City shall promote the protection of watersheds and drainage systems within Fortuna by requiring mitigation from developers and by requiring that new development not increase the existing estimated 25-year peak runoff volume from a site.

**Policy PFS-5.19 Peak Runoff Detention.** The City shall require any increase in runoff beyond the peak 25-year event resulting from new development to be retained or detained on-site or mitigated through off-site improvements to other streams or outlets.

**Policy PFS-5.20 Low Impact Development Techniques.** The City shall encourage neighborhood parks, subdivisions, commercial development, and redevelopment to incorporate Low Impact Development (LID) techniques, such as bioswales and permeable pavement, to minimize storm water runoff in the City and comply with the NPDES permit.

**Policy PFS 1.1 Public Facility Monitoring.** The City shall monitor water, wastewater, and storm drain system capacities on an annual basis, and make capacity improvements as needed.

**Policy PFS-1.2 Adequate Public Facilities to Serve New Development.** The City shall ensure through the development review process that adequate public facilities and services are available to serve new development when required. The City shall not approve new development where existing facilities are inadequate to support the project, unless the applicant can demonstrate that all necessary public facilities (including water, sewer, storm drainage, transportation, police and fire protection services) will be installed or adequately financed and maintained (through fees, special taxes, assessments, or other means).

**Policy PFS-1.4 Ultimate Capacity Needs.** The City shall ensure through the development review process that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs, pursuant to a master plan, to avoid the need for costly retrofitting.

**Policy PFS-1.5 Necessary Infrastructure.** The City shall require all new development and major modifications to existing development to construct necessary on-site infrastructure to serve the project in accordance with City standards.

**Policy PFS-1.6 Project Impacts on Infrastructure.** When reviewing applications for land use designation changes (i.e., General Plan amendments, specific plan amendments), the City shall analyze the impacts of the proposed land use designation changes on all aspects of the infrastructure system within the City and require mitigation as legally required. This shall include consultation with other service providers who have infrastructure within the City.

**Policy PFS-1.9 City Service Extensions to Annexation Areas.** Upon LAFCo approval, City water, wastewater conveyance and treatment, storm drainage and police service shall be extended to the Riverwalk, Strongs Creek, Carson Woods, and Rohnerville Annexation Areas. The City shall not approve new development in these areas until services are available.

**Program PFS-1.** The City shall prepare and annually review public facility master plans (e.g., water, wastewater, drainage). Every five years, the City shall update those plans to ensure compliance with appropriate State and Federal laws, use of modern and cost effective technologies, and compatibility with current land use policy.

**Program PFS-2.** The City shall continue to update its Capital Improvement Program to address the City's existing and projected public facility needs.

**Program PFS-3.** At such time as any water, wastewater or storm drain element (pipes, pump stations, treatment facilities, etc.) reaches 90% of capacity, increased capacity shall be programmed.

**Program PFS-4.** New subdivisions, PUDs, and other large development projects (e.g., residential projects over 20 units, commercial/ office/industrial projects over 10,000 sq. ft.) shall demonstrate that adequate water, fire flow, wastewater collection, wastewater treatment/disposal, and storm drainage can be provided without adversely impacting service to existing uses.

**Program PFS 6.** The Fortuna Public Works Department shall establish and implement a fair-share fee program applicable to new development to help pay for system-wide water, wastewater conveyance, wastewater treatment, and storm drainage improvements.

**Program PFS-12.** Proposed subdivisions, PUDs and other large development projects shall route urban runoff through onsite grassy swales, infiltration/sedimentation basins, and oil/grit separators prior to discharging to the City’s municipal storm water drainage system.

**Program PFS-15.** The City shall continue to implement a Storm Drainage Master Plan and Flood Protection Master Plan to assure adequate protection for residents and property.

**Program PFS-16.** The City shall prepare and adopt a Storm Water and Flood Protection Ordinance to implement the Storm Drainage and Flood Protection Master Plan to address storm water runoff and flood protection.

**Program PFS-17.** The City shall implement a public education campaign and circulate outreach materials to protect storm water from pollutants. Currently the City has an approved Phase II Storm Water Management Program that describes the six minimum measures, which includes a public education program. Facilitating public participation and involvement in local storm water issues will be accomplished by implementing the EPA’s Best Management Practices (*Fact Sheet 2.4 Public Participation/ Involvement Minimum Control Measure, 01/00; and “Measurable Goals Guidance for Phase II Small MSAs”*), which include the following:

- 1) Establish a steering committee that meets on a quarterly basis;
- 2) Hold regular public meetings annually;
- 3) Establish regular coordination among agencies;
- 4) Storm Drain Stenciling Citywide within 2 years;
- 5) Community clean-ups; and
- 6) Adopt a Storm Drain Program.

**Program PFS-18.** The City shall implement a Post Construction Storm Water Runoff Control Ordinance in order to minimize pollutants in post-construction storm water discharges. Currently the City has an approved Phase II Storm Water Management Program that requires the City to implement post-construction runoff control from new development and redevelopment to the extent allowable, as part of the Municipal Permit conditions.

**Program PFS-19.** The City shall, by resolution, adopt a Manual of Storm Water Quality Control Standards for New Development and Redevelopment, which will include requirements identifying appropriate design standards and best management practices to control the volume, rate, and potential pollutant load of storm water runoff from new development and redevelopment projects as may be appropriate to minimize the generation, transport and discharge of pollutants. To the extent permitted by law, the City shall incorporate such requirements in any land use entitlement and construction or building-related permit to be issued relative to such development or redevelopment.

**Program NCR-2.** For proposed development projects that would result in greater than one acre of ground disturbance, the City shall implement State provisions requiring the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall identify measures to manage exposed soils, control deposition of pollutants by construction vehicles, cleanup spills of oil and

other pollutants, and prevent pollutants from leaving the construction site in runoff. The SWPPP shall also identify BMPs to avoid significant sedimentation in runoff from the construction site.

**Program NCR-3.** The City shall require proposed new projects that result in parcels less than one (1) acre in size to connect to the City's municipal water wastewater, and storm drain systems.

**Program NCR-4.** The City shall manage the extent of impervious coverage in the Planning Area to reduce impervious area coverage and to minimize directly connected impervious areas. This will reduce impacts associated with runoff from new development and re-development projects in the Planning Area.

**Program NCR-6.** The City shall require the use of basic water quality strategies that self-treat runoff in new development and re-development projects. These strategies may include infiltrating runoff, retaining/detaining runoff, conveying runoff slowly through vegetation, and/or treatment of runoff on a flow-through basis using other standard treatment technologies.

## Impacts and Mitigation

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### Impact 7.3-1: Alter Existing Drainage Patterns Leading to Substantial Erosion or Siltation

*Proposed General Plan implementation could substantially alter the existing drainage pattern of the area by altering the course of a stream or river, in a manner that results in substantial erosion or siltation on/or off-site.*

#### Discussion

The 8,051-acre Planning Area currently includes approximately 2,301 acres of urban use (Table 3.1-2 in Chapter 3.0 of this PEIR).<sup>1</sup> Under the proposed plan, at buildout the urbanized area will increase by 28% to 2,948 acres. If developed exclusively with impervious surfaces, the added volume of storm water runoff could lead to erosion of unlined drainage facilities and creeks within the Planning Area and leave sediment deposits in the creeks and Eel River. This scenario is extremely unlikely given the density limitations, yard setbacks, and open space requirements of the Proposed Plan.

The proposed plan includes policies and programs to minimize any changes to the quantity and/or quality of water discharged into the municipal storm drain system:

- Policy PFS-5.2 requires the City to support the use of natural storm water drainage systems;
- Policy PFS-5.4 requires new development to improve the quality of runoff through use of appropriate and feasible mitigation measures;

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<sup>1</sup> This impervious surfaces estimate includes the single family, multi-family, commercial, industrial and public rights-of-way land use categories in Table 3.1-2.

- Policy PFS-5.7 requires the City to implement on-site storm drainage treatment facilities in City projects wherever feasible;
- Policy PFS-5.8 requires the City to use and model storm water detention facilities and other low impact development techniques in order to mitigate drainage impacts;
- Policy PFS-5.9 requires the City to collaborate with property owners in hillside areas to minimize erosion and conveyance into City-owned drainage facilities;
- Policy PFS-5.10 prohibits grading activities during the rainy season unless a Winterization Plan has been submitted and approved by the City;
- Policy PFS-5.14 requires site-specific technical studies for all major developments with the potential of creating erosion control, watershed or flooding problems;
- Policy PFS-5.20 requires the City to support the incorporation of low impact development techniques in proposed development projects;
- Program PFS-12 requires proposed large development projects to route urban runoff through onsite grassy swales, infiltration/ sedimentation basins, and oil/ grit separators prior to discharging to the City's municipal storm water drainage system;
- Program PFS-19 requires the City to adopt a Storm Water Quality Control Standards Manual for new development and redevelopment and incorporate such requirements in any proposed development or redevelopment project; and
- Program NCR-4 requires the City to manage the extent of impervious surface coverage in the Planning Area.

In addition to these policies and programs, City review of flood control, drainage, grading permits, and storm water runoff controls under the State's NPDES programs will mitigate potential impacts associated with increased runoff and other surface drainage modifications, including potential impacts to channel stability, and stream bank erosion due to changes in drainage patterns. In addition, because municipal storm water discharges to surface waters are required to comply with Fortuna's NPDES discharge permits, and because these permits have been designed by the regulatory agencies to avoid significant impacts, the discharges will not lead to significant erosion and sedimentation. Finally, no alterations affecting the course of streams or rivers are proposed.

For these reasons, the proposed plan will not substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on/or off-site. Therefore, any impacts will be less-than-significant.

### **Determination of Level of Significance**

Less-Than-Significant

### **Mitigation**

No mitigation necessary

## Impact 7.3-2: Increase Surface Runoff Leading to Increased Flooding

*Proposed General Plan implementation could substantially increase the rate and/or volume of surface runoff resulting in flooding.*

### Discussion

The proposed General Plan will increase development in underdeveloped and/or underutilized areas, particularly within the proposed Focus Areas and Annexation Areas. A gradual increase in impervious cover associated with new development could increase storm water runoff by up to 28% (note previous impact discussion). The City has been monitoring the performance of its storm drain system through periodic updates of its Storm Drainage Master Plan, and has been repairing deficiencies in the system as funding has permitted. The 2005 Storm Drainage Master Plan identified 79 deficient drainage structures in the City. Unless the City repairs these deficiencies and constructs storm drain improvements required to serve new development, additional development facilitated under the proposed plan could lead to flooding within or downstream of the Planning Area.

The proposed plan includes policies and programs to minimize increases in surface runoff resulting from development under the proposed plan, and to ensure the construction of adequate storm drainage infrastructure associated with this development.

- Policy PFS-1.4 requires the City to ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs;
- Policy PFS-5.1 requires the City to regularly inspect and maintain drainage system facilities to ensure that their full carrying capacity is not impaired;
- Policy PFS-5.3 requires the provision of adequate drainage facilities in new development to adequately convey 25-year storm event runoff without on-site or downstream flooding;
- Policy PFS-5.5 requires that new development have surface drainage disposal accommodated;
- Policy PFS-5.13 requires the City to monitor the implementation of the Storm Drain Master Plan as development occurs to ensure that the improvements are not being oversized nor undersized;
- Policy PFS-5.14 requires site-specific drainage studies be prepared for all major developments that have the potential to flooding problems;
- Policy PFS-5.16 requires the City to monitor development projects in the County's jurisdiction to ensure new projects do not adversely impact the City's drainage system;
- Policies PFS-5.18 and -5.19 require mitigation measures for developers to ensure that new development does not increase the existing estimated 25-year peak runoff volume from a site;
- Program PFS-1 requires the City to annually review and update (every five years) the Storm Drainage Master Plan;

- Program PFS-3 requires the programming of improvements at such time as any storm drain facilities reach 90% of capacity;
- Program PFS-4 requires proposed large development projects to demonstrate that adequate storm drainage can be provided without adversely impacting service to existing uses;
- Program PFS-12 requires large development projects route urban runoff through onsite grassy swales, infiltration/sedimentation basins, and oil/grit separators prior to discharging to the City's municipal storm water drainage system;
- Program PFS-16 requires the City to prepare and adopt a Storm Water and Flood Protection Ordinance to address storm water runoff and flood protection; and
- Program NCR-3 requires proposed new projects that result in parcels less than one acre in size to connect to the City's municipal storm drain system.

With implementation of these proposed policies and programs, the proposed plan will not substantially increase the rate or volume of surface runoff in a manner that could result in on- or off-site flooding. Therefore, any impacts will be less-than-significant.

### **Determination of Level of Significance**

Less-Than-Significant

### **Mitigation**

No mitigation necessary

### **Impact 7.3-3: Exceed Existing or Planned Storm Water Drainage System Capacity**

*Proposed General Plan implementation could create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems.*

### **Discussion**

See the previous impact for analysis.

For the same reasons discussed under the previous impact, the proposed plan will not create or contribute runoff water in excess of the capacity of existing or planned storm water drainage systems, and any impacts will be less-than-significant.

### **Determination of Level of Significance**

Less-Than-Significant

### **Mitigation**

No mitigation necessary

### **Impact 7.3-4: New or Expanded Storm Drainage Facilities**

*Proposed General Plan implementation could result in the construction of new storm water drainage facilities and expansion of existing facilities, the construction of which could cause significant environmental effects.*

#### **Discussion**

Construction activities are regulated by the NPDES General Construction Storm water Permit. Compliance with the storm water permit during construction activities requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) that contains BMPs to control the discharge of pollutants, including sediment, into local surface water drainages. Additionally, the City, in accordance with its approved Phase II Storm Water Management Program, must implement Post-Construction Storm water Management in new development and redevelopment.

In addition to complying with the NPDES programs, the Proposed Plan contains policies and programs to reduce impacts associated with construction of new storm water drainage facilities:

- Policy PFS-5.2 requires the City to encourage the use of natural storm water drainage systems in a manner that preserves and enhances natural features;
- Policy PFS-5.6 requires future drainage systems comply with applicable State and Federal non-point source pollutant discharge requirements;
- Policy PFS-5.10 requires a Winterization Plan be submitted and approved by the City, in conjunction with a grading permit application for grading activities during the rainy season;
- Program PFS-18 requires the City to implement a Post Construction Storm Water Runoff Control Ordinance; and
- Program PFS-19 requires the City, by resolution, to adopt a Manual of Storm Water Quality Control Standards for New Development and Redevelopment, that will include requirements identifying appropriate design standards and best management practices to control the volume, rate, and potential pollutant load of storm water runoff from new development and redevelopment projects.

For the reasons stated above, the proposed plan will not result in significant environmental impacts associated with the construction of new storm water drainage facilities and expansion of existing facilities. Therefore, any impacts will be less-than-significant.

#### **Determination of Level of Significance**

Less-Than-Significant

#### **Mitigation**

No mitigation necessary

## References Cited

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