

Total Vehicle Miles of Travel (VMT) and Vehicle Hours of Travel (VHT) Weekday on Marin County Roadways

Table 3

Year - Scenario	In A.M. Peak Hour		In P.M. Peak Hour		Daily	
	VMT (Miles)	VHT (Hours)	VMT (Miles)	VHT (Hours)	VMT (Miles)	VHT (Hours)
Existing Year 2005						
Year 2005	493,023	15,486	587,418	20,541	6,998,778	169,067
Revised Year 2005	467,917	12,913	586,023	18,849	7,003,560	166,402
Percentage Diff.	-5.09%	-16.62%	-0.24%	-8.24%	0.07%	-1.58%
Year 2030 - CWP Alternatives						
Option 1	599,194	19,770	775,820	41,747	8,499,115	205,778
Revised Option 1	615,527	20,805	792,999	46,029	8,809,258	216,471
Percentage Diff.	2.73%	5.24%	2.21%	10.26%	3.65%	5.20%
Option 2	599,853	19,754	778,048	44,132	8,517,766	206,182
Revised Option 2	616,215	20,872	795,065	47,577	8,827,123	217,083
Percentage Diff.	2.73%	5.66%	2.19%	7.81%	3.63%	5.29%
Option 3	600,488	19,988	779,305	44,366	8,525,005	206,351
Revised Option 3	616,258	20,826	793,427	45,223	8,823,921	217,036
Percentage Diff.	2.63%	4.19%	1.81%	1.93%	3.51%	5.18%
No Project (1994 CWP)	605,250	20,319	784,795	44,945	8,558,333	207,304
Revised No Project (1994 CWP)	623,226	21,541	797,948	46,157	8,860,900	217,787
Percentage Diff.	2.97%	6.01%	1.68%	2.70%	3.54%	5.06%
Environmental Preservation	597,746	19,876	775,224	42,152	8,465,208	204,687
Revised Environmental Preservation	615,110	20,939	792,136	42,750	8,782,537	215,339
Percentage Diff.	2.90%	5.35%	2.18%	1.42%	3.75%	5.20%
Economic Vitality	601,469	19,951	776,545	43,690	8,515,215	206,089
Revised Economic Vitality	618,029	21,032	793,463	45,158	8,830,352	217,065
Percentage Diff.	2.75%	5.42%	2.18%	3.36%	3.70%	5.33%
Mitigated Alternative	599,781	18,497	784,821	39,704	8,443,819	201,096
Revised Mitigated Alternative	624,924	19,966	810,898	44,651	8,889,684	215,464
Percentage Diff.	4.19%	7.94%	3.32%	12.46%	5.28%	7.14%

Source: Transportation Authority of Marin (TAM) - Marin Travel Model (MTM), October - 2006
Land Use Data (TAZ 85) : ABAG's Projections 2003

Notes:

- (1) Network Assumptions: for Y 2030, the Transportation Network includes HOV lanes on Highway 101 from SR 1 to Highway 37 (Gap Closure Proj. U.S. 101 completed) in Marin County.
No HOV lanes at Novato Narrows except for CWP Mitigated Alternative.

- (2) No Passenger Rail is assumed to be operating on the North West Pacific Rail Road (NWPRR) right of way

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Attachment 2

Draft Marin Countywide Plan Transportation Policies and Programs for Transportation

- TR-1.1** **Manage Travel Demand.** Improve the operating efficiency of the transportation system by reducing vehicle travel demand and provide opportunities for other modes of travel.
- TR-1.2** **Maintain Service Standards.** Establish level of service standards for vehicles on streets and highways and performance standards for transit (see Map 3-8, Roadway Network of Marin County), bicycles, pedestrians, and other modes of transportation.
- TR-1.3** **Pursue Needed Funding.** Seek necessary support to provide improvements called for in the *Transportation Vision* and Transportation Authority of Marin’s expenditure plan, maintain service levels at established standards, and meet multi-modal objectives.
- TR-1.4** **Share the Costs for Improvements.** Require new development to pay or otherwise improve its fair share of the transportation system impacts.
- TR-1.5** **Require Necessary Transportation Improvements.** Require necessary transportation improvements to be in place, or otherwise guaranteed to result in their timely installation, before or concurrent with new developments.
- TR-1.6** **Keep Rural Character in West Marin.** Maintain roads in west Marin as two-lane routes, with the possible additions of bicycle lanes, turn lanes at intersections, and turnouts for slow-moving traffic.
- TR-1.7** **Direct Aviation Uses to Appropriate Locations.** Maintain Gnossov Field as the County’s civilian airport facility and limit its use and expansion in accordance with the adopted Airport Master Plan. Continue to allow the private San Rafael Airport and the Richardson Bay seaplane base and helipad. Require additional aviation facility proposals to conduct site-specific environmental analysis prior to consideration.
- TR-1.a** *Support Alternate Work Schedules.* Encourage employers to allow alternate work schedules for employees, telecommuting, and use of satellite work centers (also see Programs in the Socioeconomic Element).
- TR-1.b** *Allow Live-Work Arrangements.* Amend the Development Code to allow and encourage live-work, cottage industry, self employment, and home occupation uses in appropriate locations.
- TR-1.c** *Promote Transportation Alternatives.* Work with local, State, and federal governments, businesses, schools, seniors, and environmental groups to encourage use of transit, vanpools, carpools, car sharing, bicycles, and walking, including providing incentives to employers, commuters, and recreational users to support these transportation alternatives.

- TR-1.d** *Coordinate with Local Agencies.* Work with the Countywide Planning Agency, Department of Public Works, Transportation Authority of Marin, Metropolitan Transportation Commission, and other Bay Area counties, to coordinate transportation system planning, including updating the County Congestion Management Program and the Capital Improvement Program to prioritize the projects that will meet the goals of the County *Transportation Vision*.
- TR-1.e** *Uphold Vehicle Level of Service Standards.* Uphold peak-hour vehicle Level of Service standard (LOS) D or better for urban and suburban arterials and (LOS) E or better for freeways and rural expressways¹. Only the Congestion Management Program specified roadway and highway segments operating at a lower LOS than the standard in 1991 are “grandfathered” and may continue to operate at the lower LOS standard until such time as the roads are improved or the traffic load or demand is altered or diverted. An improvement plan should be developed on Highway 101 and the grandfathered roadway segments to address existing deficiencies. Prohibit development which results in the level of service standards to be exceeded at any intersection unless no alternatives exist and an overriding public need can be demonstrated.
- TR-1.f** *Analyze Multi-Modal Performance.* Develop methods and adopt standards to assess the performance of pedestrian, bicycle, and transit facilities, and measure the success of those components against the goals of the County *Transportation Vision*.
- TR-1.g** *Determine Appropriate Mitigation.* Work with the Transportation Authority of Marin to monitor the traffic impacts of development and identify mitigation requirements for proposed development that would cause a drop below adopted LOS, including transportation system improvements, impact fees, Transportation Demand Management strategies, direct support of alternative travel modes, or project redesign; and amend the Development Code to incorporate those requirements. Require the preparation of a traffic impact analysis report to identify impacts and mitigation measures for projects that may result in significant traffic impacts.
- TR-1.h** *Add Transportation Policies to Community Plans.* Incorporate Vehicle LOS standards, recommended transportation system improvements, and additional policies and standards appropriate to reduce traffic congestion and improve walking and bicycling in specific unincorporated communities covered by Community Plans.
- TR-1.i** *Adopt Flexible Parking Standards.* Amend the Development Code and work with cities to allow reduced automobile parking requirements for projects that participate in subsidy programs for transit riders or provide direct access to multi-modal transit hubs.
- TR-1.j** *Install Highway Improvements.* Work with the Transportation Authority of Marin and Caltrans to carry out physical and operational improvements, such as completion of the High Occupancy Vehicle lane and ramp metering projects on Highway 101.
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- TR-1.k** *Update Transportation System Modeling.* Maintain transportation system modeling capability for the purpose of providing estimates and projections of trip generation, transportation demand, and Vehicle LOS on the road network and transit routes within the modeling system, and incorporate multi-modal performance measures and indicators as feasible.
- TR-1.l** *Update Traffic Mitigation Fees.* Review and update as necessary the Public Transportation Facilities Fee schedule to add transportation improvements in specific unincorporated areas, and consider broadening the use of these fees to include alternative mode projects intended to mitigate increases in travel demand and congestion. Amend the Sub-regional Transportation Fee study and Roadway Impact fees to keep pace with future transit demand as needed. Amend the Public Transportation Facilities Fee ordinance to allow a waiver, reduction, or adjustment in traffic mitigation fees for affordable housing projects.
- TR-1.m** *Promote Regional Traffic Mitigation Fees.* Encourage the Transportation Authority of Marin to require new development to fund or otherwise support solutions, including alternative mode projects that will mitigate growth in regional traffic and improve the livability of communities and improve quality of life.
- TR-1.n** *Obtain and Dedicate Transportation Funding.* Apply for funds from State and federal sources, and use general funds, fees, privately funded improvements, user charges, and local taxes for transportation improvements to provide improvements called for in the *Transportation Vision*, maintain service levels at established standards, and meet multimodal objectives.
- TR-1.o** *Keep West Marin Rural.* Limit west Marin roads to two lanes, and work with State and federal agencies and local communities to enhance road safety, improve pedestrian, bicycle and transit access, and maintain or reduce congestion through means such as limiting local parking, creating a multi-purpose path from west Marin to the City Centered Corridor, and providing shuttle service to popular destinations. Shoulder widening for bicycles, turn lanes at intersections, turnouts for slow moving traffic, traffic calming measures, and similar improvements would be permitted; however, projects will not be undertaken to increase the motorized vehicular capacity of west Marin roads.
- TR-1.p** *Limit Aviation Uses.* Maintain the County Airport at Gness Field as the primary civilian airport facility in the county, and limit its use to general aviation and emergency flights, in accordance with the *Airport Master Plan for Gness Field* (1989) and current technological conditions. Continue to allow the private San Rafael Airport facility and the heliport and seaplane bases in Richardson Bay to provide water-oriented visitor and commercial uses. Any proposed helipad shall be subject to all applicable CEQA requirements prior to consideration. Allow discretion by the Board of Supervisors for changes to aviation policy.
- TR-2.1** **Improve the Bicycle and Pedestrian Network.** Ensure that all areas of the county have adequate bicycle and pedestrian links, both internally and to other parts of the county, and that streetscape improvements and standards are pedestrian and bicycle friendly.

- TR-2.2** **Provide New Bicycle and Pedestrian Facilities.** Where appropriate, require new development to provide trails or paths for use by bicycles and/or on-street bicycle and pedestrian facilities. In lieu fees may be accepted if warranted in certain cases.
- TR-2.3** **Connect to State and Federal Parklands.** Explore the possibility of creating bicycle and pedestrian trails that would connect urban areas to federal and State parklands in Marin County.
- TR-2.4** **Seek Funding Opportunities for Bicycle and Pedestrian Infrastructure.** Seek grants and other funding opportunities available to construct new bicycle and pedestrian infrastructure and to connect existing segments.
- TR-2.a** *Encourage Bicycling.* Work with local community groups to encourage bicycling for local trips by students, commuters, visitors and shoppers through marketing and incentive programs, as well as improved facilities.
- TR-2.b** *Adopt Standards for Pedestrian and Bicycle Access.* Amend the Development Code to include standards for provision of facilities to safely accommodate pedestrians and bicycles, including in the design of roadways, and to require new development and redevelopment projects to address, where appropriate: bicycle and pedestrian access internally and/or to other areas through easements and/or safe access to/from public transportation and/or construction of paths that connect with other non-motorized routes; safe road crossings at major intersections for school children and seniors; and secure, weatherproof bicycle storage facilities and shower/changing room facilities for bicycle commuters. Assure that such facilities will have ongoing maintenance.
- TR-2.c** *Support Bicycle Stations and Consider Attended Parking.* Encourage the development of bicycle stations, attended parking, and other attended bicycle parking support facilities at intermodal hubs, such as the future Southern Marin transportation hub, the Larkspur Landing Ferry Terminal, at future SMART rail stations, and for large public events to encourage people to “bike to transit.” Bike stations are full-service bicycle facilities providing secure and guarded “valet” bicycle parking in addition to other possible amenities, such as showers or bicycle rentals and repairs.
- TR-2.d** *Fund Projects.* Work with the Transportation Authority of Marin and the Bicycle Advisory Group to implement the 2001 County *Bicycle and Pedestrian Master Plan*; include pedestrian and bicycle projects in the County Capital Improvement Program; and apply, where feasible, a portion of traffic mitigation fees toward improvements that will increase bicycle transportation and mitigate congestion. On site improvements or within the vicinity of approved development are a priority.
- TR-2.e** *Prioritize Completion of the North-South and East-West Bikeways.* Work with applicable governmental agencies to identify gaps in the North- South and East-West Bikeways, and to place a high priority on obtaining funding for projects that complete these gaps.
- TR-2.f** *Develop “Rails with Trails.”* Continue to work with SMART to incorporate and fund a multi-use pathway that generally follows the proposed SMART railroad corridor.

- TR-2.g** *Add Bicycle Lanes.* Identify roads with shoulders wide enough to be designated as bicycle lanes and, where feasible, stripe and sign appropriate roadway segments as bike lanes and bike routes.
- TR-2.h** *Encourage Innovative Bicycle Lane Design.* Encourage the incorporation of innovative design concepts in the development of bicycle lane projects and consider using techniques and ideas employed in other communities throughout Europe and the U.S.A, such as: colored bike lanes, signage, lighting, and other safety features.
- TR-2.i** *Renovate Tunnels along the Planned North-South Bikeway into Multi-Use Pathways.* Support, reopening of the California Park Hill Tunnel and, if feasible, reopening of the Alto Hill Tunnel as key connections in the bicycle and pedestrian network system. The California Park Hill Tunnel provides a key multi-modal connection between the San Rafael Transit Center and Larkspur Landing Ferry terminal, both major transit hubs; and the Alto Hill Tunnel provides a direct, nearly-level link between Mill Valley and Corte Madera.
- TR-2.j** *Ensure Safe Routes to Schools.* As funding permits, continue to work with local school districts to ensure that children have safe walking and bicycling routes to schools, and incorporate projects needed to support the Safe Routes to Schools program into the County Capital Improvement Program. Continue the Marin County Safe Routes to Schools encouragement and education program, which provides bicycle and pedestrian safety training, events, contests, law enforcement, and the identification of potential bicycle and pedestrian transportation improvements.
- TR-2.k** *Consider Pedestrian Needs.* Work with local cities to ensure that traffic signals are timed to allow safe and comfortable pedestrian crossing; work with Caltrans to improve pedestrian access to freeway bus pads along Highway 101; and work with local communities Transportation Authority of Marin, school districts, and Safe Routes to Schools to encourage the creation of a countywide school crossing guard program.
- TR-2.l** *Consider Non-motorized Access in Transportation Projects.* Include safe and convenient bicycle and pedestrian access, where feasible, in all transportation improvement projects. Request that Caltrans and the Federal Highway Administration provide separated bicycle and pedestrian access as part of any roadway or interchange improvement work and that access for pedestrian and bicyclists be available during construction.
- TR-2.m** *Explore Funding Options.* Continue to apply for regional, State and federal grants for bicycle and pedestrian infrastructure projects, and consider using general fund monies, state gas tax subventions, sales tax funds, development exactions/impact fees to provide bicycle and pedestrian facilities, as well as Safe Routes to School programs.
- TR-2.n** *Support Non-Motorized Transportation Pilot Program.* Strive to secure funding as a Nonmotorized Transportation Pilot Program community through submission of a competitive application and coordination and support of local agencies, elected officials, and advocacy groups.

- TR-3.1** **Encourage and Support the Expansion of Local Bus Service.** Encourage expansion and improvement of local bus service to all areas of the county.
- TR-3.2** **Support Regional Transit Initiatives.** Promote rail service on the Northwestern Pacific Railroad right-of-way and a multi-use pathway that generally follows the rail corridor, expanded regional ferry service, and enhanced regional express bus services.
- TR-3.3** **Develop Mixed-Use Intermodal Hubs.** Support and participate in the development of intermodal transit hubs that expand alternative transportation use.
- TR-3.4** **Support and Coordinate Paratransit Service.** Fund paratransit service and integrate it with fixed-route service, including school services, to efficiently meet the needs of transit-dependent persons.
- TR-3.5** **Support Bicycle Access to All Transit Systems.** Ensure that all new and existing transit systems provide for the storage of bicycles on transit as well as at transit centers.
- TR-3.6** **Reduce Congestion Due to Visitor Traffic in West Marin.** Coordinate with Caltrans, local, state, and federal parkland agencies, and local communities to provide alternatives to recreational automobile travel to recreational areas in west Marin.
- TR-3.a** *Increase Bus Service.* Work with the Marin County Transit District, Golden Gate Transit District, Marin Office of Education, Marin Commission on Aging, and park agencies to increase the coverage and frequency of public bus service and to develop and meet standards for local, school, paratransit, and visitor-serving bus service, and work with local cities to meet the needs of Marin County.
- TR-3.b** *Provide Schedules and Shelters.* Encourage bus service providers to post current schedules and maps at all transit stops and other key locations, to make real time arrival information available to riders, and to provide shelters that adequately protect riders from inclement weather.
- TR-3.c** *Provide Reduced-Cost Transit Passes.* Provide reduced-cost transit passes for students, and other special needs groups, including homeless people engaged in education and employment activities.
- TR-3.d** *Join in Regional Transit Initiatives.* Participate in planning for rail transportation through SMART, ferry service enhancements through the Water Transit Authority, and other regional transit expansion initiatives.
- TR-3.e** *Upgrade and Create Intermodal Hubs.* Work with cities, transit providers, and other agencies to seek funding to upgrade and create intermodal hubs that facilitate seamless connections between transit services; are comfortable and convenient for pedestrians, bicyclists, transit users, and drivers; and, where feasible, provide secure bike parking and other services, such as convenience retail, real-time transit arrival information, way finding information, short transfer distances, and quality design.
- TR-3.f** *Promote Transit-Oriented Development.* Amend the Development Code to encourage compact mixed-use development within ½-mile of intermodal hubs and

future rail stations, and to offer flexible standards for affordable housing to create sufficient ridership to support such uses.

- TR-3.g** *Coordinate Paratransit.* Encourage the Marin County Transit District to provide information and referral service to paratransit riders and social service agencies, coordinate the operations of contractors to meet the needs of riders, and integrate paratransit effectively with fixed-route service to ensure adequate coverage and reduced reliance on fixed-route services.
- TR-4.1** **Minimize Disturbance and Condemnation.** Limit environmental disruption and condemnation of land due to transportation projects.
- TR-4.2** **Recycle and Conserve Energy.** Include recycled and energy-conserving materials for road construction and repair, where feasible.
- TR-4.3** **Increase Clean-Fuel Vehicle Use.** Encourage switching from conventional cars and transit vehicles to zero, partial zero, or other low emission vehicles.
- TR-4.a** *Limit Project Impacts.* Work with Caltrans and private transportation contractors to minimize environmental damage and stormwater run-off through best management practices, and to avoid condemnation of private or publicly owned land in conjunction with transportation improvement projects.
- TR-4.b** *Use Recycled and Resource Efficient Materials.* Use resource efficient materials, such as rubberized asphalt concrete and pervious pavement, in road repair and construction wherever cost-effective and feasible.
- TR-4.c** *Support Green Fuels.* Work with advocacy groups to promote the use of hybrid and low-emission vehicles and clean fuels (including biodiesel) as feasible based on cost and availability, set targets for increasing the proportion of clean-fuel vehicles in the County fleet, and encourage transit agencies to increase their use of clean-fuel vehicles.
- TR-4.d** *Encourage Zero, Partial Zero, and Low-Emission Vehicle Use.* Publicize the State and Federal approval of zero and partial zero emission vehicles (with a fuel economy of at least 45 miles per gallon) to use HOV lanes.

Attachment 3

Draft Marin Countywide Plan Transportation Policies and Programs for Public Facilities and Services relating to Water Supply

- PFS-1.1** **Require Cost-Sharing.** Require new development to pay for the infrastructure it requires and the public services it receives.
- PFS-1.2** **Plan Effectively to Minimize Costs.** Plan public facilities in cooperation with service providers to minimize short- and long-term construction, operation, and maintenance costs.
- PFS-1.3** **Discourage Privatization and Commercialization.** Encourage public ownership of utilities and public service facilities by not authorizing privatization of water, sewer, law enforcement, emergency service, school, and other essential services. Consider prohibiting corporate sponsorship and commercially-driven naming rights of public facilities and lands as a means to fund maintenance and improvements.
- PFS-1.4** **Reduce Demand on Public Facilities.** Reduce demand for water, wastewater treatment, and stormwater management through integrated and cost-effective design and technology standards for new development and redevelopment
- PFS-1.a** *Require Fair-Share Contributions.* Obtain studies from service providers that determine the cost of providing public services and facilities to new development, and encourage special districts, schools, and cities to adopt development impact fees and require new development to pay those costs, including by providing needed facilities. Affordable housing developments that meet specified criteria may warrant full or partial fee reductions.
- PFS-1.b** *Plan for Service Expansion.* Work with LAFCO, cities, and special districts to ensure that necessary public facilities and adequate water supply are in place prior to occupancy of new development and funded at levels that reflect their true short- and long-term costs (also see programs CD-6.c in the Community Development section of this Element and PFS-2.a).
- PFS-1.c** *Prepare Naming and Sponsorship Guidelines.* Work with interested parties to evaluate the potential benefits and liabilities of accepting funding for naming rights and sponsorship arrangements regarding open space preserves, parks, and other public lands and facilities, although continued honorary and memorial naming should be considered as appropriate.
- PFS-1.d** *Reduce Demand on Public Facilities.* Assess and revise community development and facilities rules to incorporate least-cost (including environmental, economic and societal costs) and integrated resources planning for water, wastewater and storm water infrastructure.
- PFS-2.1** **Conserve Water and Utilize Sustainable Sources.** Promote conservation to increase the responsible use and reliability of water supplies. Reduce the waste of potable water through efficient technologies, design and management practices, and better matching the source and quality of water to the user's needs.

- PFS-2.2** **Mitigate Increased Water Demand in New Development.** Work with local water agencies to mitigate increases in water demand due to new development by supporting water efficiency programs that decrease demand by a similar amount.
- PFS-2.3** **Manage Water Resources Sustainably.** Manage water resources to assure equitable amounts of clean water for all users, to support wildlife habitat, and to preserve natural resources within the sustainable limits of water supplies. (See also Natural Systems and Agriculture Element, Water Resources Section.)
- PFS-2.a** *Support and Integrate Water Conservation Efforts.* Support the efforts of the water districts to reduce waste and increase reuse through integrated planning of programs and complementary land use and building regulations. Assess and remove barriers to integrated water resource planning (see policies and programs under Goal WR-3 in the Natural Systems and Agriculture Element).
- PFS-2.b** *Minimize the Demand for Water in New Development.* Encourage everyone such as service providers and service districts to incorporate water, wastewater, and stormwater infrastructures on a least-cost basis, factoring in relevant environmental, economic, and social costs. Consider water-based services that reduce demand and draw on alternative supplies to be equivalent to new supplies. Water-based services include the application of state-of-the-art technology and practices; matching water quality to its end use; and financing local wastewater reuse in the same manner that centralized water supply options are financed.
- PFS-2.c** *Promote Ahwahnee Principles for Water Supply.* Encourage local water providers to enact programs that promote the Ahwahnee Principles for water supply.
- PFS-2.d** *Support Water Demand Planning.* Work with the water supply companies in the development of the Urban Water Management Plans to use the Countywide Plan and the cities' and-towns' General Plans ultimate build-out numbers.
- PFS-2.e** *Conduct Water Planning through LAFCO Studies.* Encourage the Local Agency Formation Commission to assess water supply and demand in their boundary area studies.
- PFS-2.f** *Initiate a Water Conservation Program.* Develop model water demand management programs using best practices, including the following:
- ◆ Requiring Water Conservation on New Constructions
 - ◆ Requiring Water Conservation Fixtures
 - ◆ Encouraging Business Rebates
 - ◆ Encouraging Plumbing Maintenance Programs
- PFS-2.g** *Promote Xeriscaping.* Amend the Development Code to require drought-tolerant landscaping and efficient irrigation systems where appropriate for all development applications and re-landscaping projects and limit the amount of lawn area allowed to reduce the amount of water required for irrigation.
- PFS-2.h** *Promote Native Plants in Public Facilities.* Restore and promote the native plants garden at the Civic Center, and the development of similar landscaping for all public facilities.

- PFS-2.i** *Promote Water Saving Irrigation.* Encourage use of irrigation technologies such as evapotranspiration systems – where real time weather data is transmitted to installed controllers to automate water needs – that save water, promote greater plant health, and reduce runoff. Encourage water agencies to conduct irrigation training workshops for homeowners and professionals.
- PFS-2.j** *Upgrade West Marin Systems.* Encourage service providers to upgrade the water delivery systems in west Marin to reduce the incidence of saltwater intrusion and leakage.
- PFS-2.k** *Investigate Tomales Bay Groundwater.* Conduct a study of groundwater availability and water quality of the Tomales Bay watershed, including the Walker, Lagunitas, Stemple, and Olema Creek watersheds, and the aquifer bordering the Petaluma River, to determine the potential for using local groundwater to supplement drinking water supplies.
- PFS-2.l** *Reduce Energy Use from Water Facilities.* Work with water agencies on a joint effort to offer energy conserving and renewable power facilities (such as solar photovoltaic) to contribute energy back into the grid to offset energy used in water development and distribution.
- PFS-2.m** *Promote Catchments.* Encourage use of rainwater catchments for irrigation and other non-potable uses, and work with service providers to establish standards for rainwater quality.
- PFS-2.n** *Conduct Groundwater Recharge Study.* Work with water suppliers to study the efficiency and cost-effectiveness of rainwater harvesting systems and infiltration and recharging patterns of groundwater aquifers to assess the feasibility of using direct precipitation collection to supplement existing water sources.
- PFS-2.o** *Assess Project Impacts to Groundwater.* Require documentation that new development projects with the potential to degrade or deplete groundwater resources will not adversely affect a basin or subbasin.
- PFS-2.p** *Investigate and Consider Appropriate Small-Scale Wastewater Use.* Work with water agencies to resolve conflicting regulations regarding pre-treated septic drip dispersal systems and appropriate graywater use, to evaluate the potential of small-scale portable graywater converter systems as possible sources for landscaping water, and to modify regulations as necessary to encourage safe graywater use (such as by dual systems that employ graywater to support landscaping). (Also see Water Resource policies and programs.)
- PFS-2.q** *Adopt Tiered Billing Rates.* Encourage all Marin County water agencies to adopt the California Urban Water Conservation Council’s Best Management Practice of tiered billing rates to encourage water conservation.