CITY OF CHULA VISTA

GROWTH MANAGEMENT PROGRAM

IMPLEMENTATION MANUAL

FEBRUARY 2015

CITY OF CHULA VISTA,

CALIFORNIA

GROWTH MANAGEMENT PROGRAM IMPLEMENTATION MANUAL

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ADOPTED FEBRUARY 17, 2015

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I. Introduction

The purpose of the *Growth Management Program Implementation Manual* (Manual) is to provide direction for implementing the city of Chula Vista's Growth Management Program, outlined in the "Growth Management Element" of the city's *General Plan* and in its "Growth Management" ordinance (Chapter 19.09 of the *Chula Vista Municipal Code* (CVMC)). The Manual sets out the procedures and requirements for how the Growth Management Program is administered, including how growth management policies integrate with other aspects of development regulation, finance, and municipal operations.

The multi-faceted Growth Management Program is comprised of and executed through several documents and related regulatory programs, and includes a systematic application of land use regulations and policies, facility and service threshold standards, environmental review, financing mechanisms, and monitoring and enforcement functions. All are designed to ensure that development occurs only when necessary public facilities and services are provided to meet the demands of new development, so that quality of life in Chula Vista can be maintained or enhanced.

The city's Growth Management Oversight Commission (GMOC) annually measures the city's quality of life by measuring the effects of growth against established performance threshold standards that reflect desired levels of services for eleven issues, and evaluates the city's ability to meet quality of life objectives at the build-out of its *General Plan*. While the focus is on the effects of new development, other factors not entirely related to new development can influence threshold compliance and/or quality of life. For instance, response times for Police and Fire/EMS encompass all calls for service citywide, not just those related to new development, and thereby may be impacted by circumstances unrelated to growth.

In addition to the GMOC, other city boards and commissions or city departments may take the lead in addressing issues related to the city's quality of life. For example, the Police Department annually provides response time data to the Public Safety Subcommittee and the Chief's Advisory Committee, the Board of Library Trustees and the Parks and Recreation Commission advise on subjects such as facilities and master plans, and the Resource Conservation Commission makes recommendations on topics such as climate change and energy efficiency. The eleven quality of life issues that are measured annually by the GMOC have been integrated into the day-to-day workings of city business and that of involved agencies for the 25-plus years since growth management was instituted.

Preservation of quality of life lies at the heart of the city's Growth Management Program and, as Chula Vista continues to grow, it will remain a vital component of the growth management process. In essence, the Growth Management Program has three primary objectives in managing quality of life:

- To assure the concurrency of new infrastructure and public service delivery capacity to maintain or improve levels of public service for the residents and businesses of Chula Vista as new growth occurs;
- To maintain the city's fiscal well-being by assuring that new development pays its proportional share of infrastructure and service costs while it strengthens the city's ability to sustain high-quality municipal services; and

- To assure that growth does not negatively affect the public health, safety and welfare or diminish the city's ability to achieve its urban development goals as expressed in the *General Plan*.

The *Growth Management Program Implementation Manual* begins by providing background information on the Growth Management Program ("GMP"). Next, it provides a summary of how the elements of the GMP function and interface with each other. Finally, the Manual explains the processes and procedures for administering the GMP.

II. Background

Chula Vista, the second largest city in San Diego County, was incorporated in 1911 and grew steadily and incrementally until the 1980s, when large-scale development began to occur in the eastern part of the city. In that decade, Chula Vista expanded its boundaries with large undeveloped ranch lands east of Interstate 805, establishing significant opportunities for the city to work with developers in providing high-quality master-planned communities, such as Rancho del Rey and Eastlake, the first of many master-planned communities in eastern Chula Vista.

At that time, there was serious concern that poorly managed growth could strain the city's ability to provide public services, worsen existing traffic problems, and lead to an overall reduction in service levels and the quality of life of its residents. To ensure that adequate infrastructure and services were keeping pace with development and that quality of life was being maintained, the Chula Vista city council appointed an ad hoc committee to develop quality of life threshold standards for the city. The concept was to establish performance standards reflecting either current or desired levels of service, and then measure the effects of growth against those standards each year. In this way, the city could use the standards to evaluate its ability to meet quality of life objectives at the build-out of its *General Plan*, and also monitor the standards annually as growth occurred to ensure that they were being met.

The ad hoc committee, consisting of representatives from community groups, the city's planning commission, and the development community, met several times over a period of months. They selected and defined threshold standards for eleven topics, including Police, Fire and Emergency Medical Services, Schools, Libraries, Parks and Recreation, Water, Sewer, Drainage, Traffic, Air Quality and Fiscal, which were introduced in a document called *Threshold Standards and Growth Management Oversight Committee Policy* (approved by city council in November 1987). The Policy defined a program that could preserve and enhance Chula Vista's public services and quality of life while growth occurs, requiring an annual citywide threshold compliance review assigned to a Growth Management Oversight Committee (GMOC) (now a commission), who must report through the planning commission to the city council, which holds a public hearing to discuss the report and take any necessary actions. The GMOC's review and report are intended to be completed prior to council budget workshops so that threshold situations, which may require funding for solution, can be accommodated during the regular budget process.

Initiated by the *Threshold Standards and Growth Management Oversight Committee Policy,* the city adopted the following growth management documents between 1987 and 1991:

1. "Controlled Residential Development" ordinance (aka the "Cummings Initiative") (Chapter 19.80 of the *Chula Vista Municipal Code*) (1988);
2. "Public Facilities and Services" element of the Chula Vista *General Plan* (1989);
3. "Growth Management Element" of the Chula Vista *General Plan* (April 17, 1990);
4. *Growth Management Program* (April 23, 1991);
5. "Growth Management Oversight Commission (GMOC)" ordinance (Chapter 2.40 of the *Chula Vista Municipal Code*) (May 7, 1991); and
6. "Growth Management" ordinance (Chapter 19.09 of the *Chula Vista Municipal Code*) (May 28, 1991).

Since 1989, some minor changes have been made to the threshold standards, and the *Threshold Standards Policy* and the "Growth Management" ordinance have been updated, accordingly. The "Growth Management Components" section (Section IV) of this Manual goes into greater detail regarding these documents and various others, which are vital tools in accomplishing the Growth Management Program's ultimate goal of maintaining and improving a high quality of life for current and future residents of Chula Vista.

In addition to growth management documents, the "Components" section summarizes various growth management regulatory programs that have been established to fund and/or are essential for the Growth Management Program to function effectively, including:

1. Development Impact Fees;
2. Intergovernmental Agreements;
3. Capital Improvement Programs; and
4. Community Facility Districts, amongst others.

The growth management documents and regulatory programs are supplemented by coordination with other agencies (school districts, water districts and the Air Pollution Control District) to monitor the effects of growth on the city.

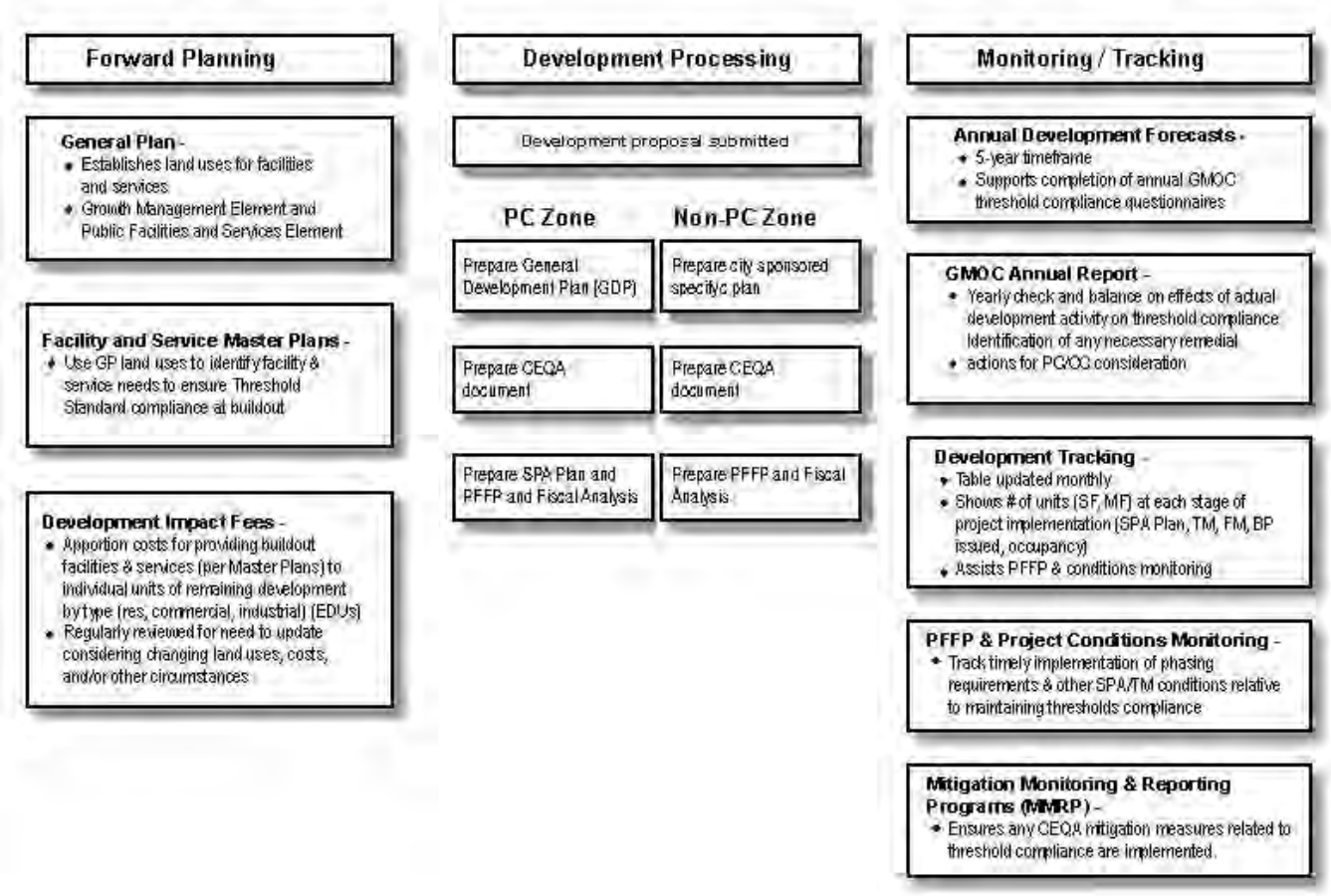
In the 25 plus years since the Growth Management Program was established, additional master-planned communities have evolved in the east, including Otay Ranch, Rolling Hills Ranch, and San Miguel Ranch, resulting in over 30,000 new housing units between 1986 and 2014. Concurrent with this growth has been the provision of public facilities and services that have generally maintained the community's quality of life, consistent with the intent of the Growth Management Program. As development continues in both eastern and western Chula Vista, the city will continue to implement the Growth Management Program to help maintain and improve the quality of life for its citizens.

III. Summary of Chula Vista's Growth Management Program

Chula Vista's Growth Management Program (GMP) is based upon policies set forth in the Chula Vista *General Plan's* "Growth Management Element", and in the "Growth Management" ordinance (Chapter 19.09 of the *Chula Vista Municipal Code*), which outlines the procedures for threshold standards and related regulatory actions, and the imposition of growth controls. The GMP policies are implemented through three fundamental aspects – **Forward Planning, Development Processing, and Monitoring/Tracking**, providing a stable and balanced method for carrying out the GMP.

The roles and functions of each of these three aspects are illustrated in Figure 1, below, and are subsequently introduced and explained.

FIGURE 1 – GROWTH MANAGEMENT PROGRAM PROCESS



A. Forward Planning

Forward planning begins with Chula Vista's ***General Plan,*** which has been updated twice since the inception of the city's Growth Management Program in 1987. Threshold standards are incorporated in the *General Plan* as policies and, when the *General Plan* is updated or amended, are used to analyze and provide technical analysis of the facility and service demands of the *General Plan's* land use proposals to determine whether they would comply with the threshold standards at *General Plan* build-out.

The *General Plan's* "Growth Management Element" establishes policy basis for growth management provisions, and the "Public Facilities and Services Element" establishes the city's plan to provide and maintain infrastructure and public services for future growth, without diminishing services to existing development.

Based upon the General Plan's land uses, the city's operating departments prepare various **Facility and Service Master Plans**, which underpin long-term threshold standard compliance by clarifying the obligations of new development with regard to a particular type of facility, such as parks or fire stations. The operating departments, as well as other agencies providing services in Chula Vista, also develop "strategic plans" that outline service demands and how these demands will be met. The city regularly interfaces with the water districts and school districts when they prepare their master plans and facility needs analyses.

To ensure that capital facilities will be constructed for the benefit of new development, **Development Impact Fees (DIF)** are to be paid for each development project within the city. DIFs are one-time charges that fund capital construction of additional sewer systems, roads, libraries, parks and recreation facilities, etc. made necessary by the presence of new residents in the area and as outlined in the facility master plans. Costs are apportioned to individual units of remaining development by type (residential, commercial, industrial) and are regularly reviewed for potential updates considering changing land uses, costs and/or other circumstances.

B. Development Processing

The GMP is woven throughout the citywide development review process for projects to determine the possible impacts of the project and to apply appropriate conditions and requirements in order to mitigate those impacts. For projects in the Planned Community zone, threshold standards are integrated into the city's development review process in a three-tiered manner, involving preparation of a General Development Plan (GDP), the preparation of a Sectional Planning Area (SPA) Plan with a corresponding Public Facilities Finance Plan (PFFP)/Fiscal Impact Analysis (FIA), and a Tentative Map. This process establishes basic land use and development provisions, completes initial environmental review under CEQA, provides a framework for subsequent environmental review and actions, and establishes mechanisms and assurances that threshold standards can be met as development is actually occurring. This approach has served the city well in managing growth in eastern Chula Vista.

For projects outside of the PC zone, a different approach to regulation has been established to manage development and redevelopment. This approach relies upon the preparation of city-sponsored specific plans and corresponding PFFPs (or equivalents), as well as a regulatory framework that accounts for the smaller size of urban infill projects and the related need for public investments.

Growth management considerations for smaller projects outside of the PC zone are addressed through the CEQA process, which may result in mitigation measures; through conditions of approval, which may require improvements or dedications; and through payment of Development Impact Fees.

C. Monitoring/Tracking – Given that the above noted project reviews and condition are based on assumptions about phasing and growth patterns, monitoring and evaluation of actual development is necessary to determine if assumptions were correct, and, if not, to be able to make adjustments as needed. Monitoring the status of development and compliance with the city's Growth Management Program is also done to ensure that the cumulative impacts of new growth do not result in deterioration of

quality of life, as measured by the threshold standards. The monitoring is accomplished through various methods.

One such method is the GMOC's Annual Report, which analyzes the effects of actual development activity on threshold standard compliance and identifies any necessary remedial actions for the planning commission and city council to consider. The report relies on responses to questionnaires completed by city departments and service agencies related to threshold standard topics. The questionnaires include a Residential Development Forecasts looking out five years, to provide agencies and departments with growth projections that may generate the need for additional services.

Development Tracking is another tool used to monitor growth. The Development Services Department produces a table monthly to track the number of single-family and multi-family units at each stage of project implementation: SPA Plan, Tentative Map, Final Map, Building Permit Issued and Occupancy. The information is useful in tracking timely implementation of Public Facility Financing Plans (PFFPS) phasing requirements and other SPA Plan or Tentative Map conditions relative to maintaining compliance with threshold standards.

Implementation of CEQA mitigation measures through Mitigation Monitoring & Reporting Programs (MMRPs) is another method used to assure threshold compliance**.**

IV. Components of the Growth Management Program

The *Threshold Standards and Growth Management Oversight Committee Policy* adopted by city council in 1987 was the first of several documents and regulatory programs that have established the framework of Chula Vista's Growth Management Program, and provide for its implementation. The functions of the various documents and regulatory programs are outlined in Tables 1 and 3 of this chapter, respectively, followed by detailed descriptions of each. The status of each document and program is also noted in the tables, as some of them have been amended or consolidated with others since their inception.

TABLE 1 – GROWTH MANAGEMENT PROGRAM DOCUMENTS

Document	Function	Status
1. *Threshold Standards and Growth Management Oversight Committee [Commission]Policy**	Established Chula Vista's Growth Management Program, identifying goals, objectives, threshold standards, and implementation measures for 11 topics, and outlining responsibilities of Growth Management Oversight Commission. (See item 7, below, for more discussion on threshold standards.)	Adopted by city council in November 1987; replaced and incorporated into the *Growth Management Program Implementation Manual* in 2015.
2. "Controlled Residential Development" ordinance (aka Cummings Initiative) (Ch. 19.80 of	Required council to adopt growth management documents and restricted timing for upzoning of	Adopted by city voters in 1988.

Document	Function	Status
Chula Vista Municipal Code)	residential property in non-planned community areas.	
3. "Growth Management Element" of *General Plan*	Establishes policy basis for growth management provisions.	Established in 1989 *General* Plan and revised in 2005 as part of *General Plan* update.
4. "Public Facilities and Services Element" of *General Plan*	Establishes the city's plan to provide and maintain infrastructure and public services for future growth, without diminishing services to existing development.	Established in 1989 *General Plan* and revised in 2005 as part of *General Plan* update.
5. *Growth Management Program*	Implementation system to meet the goals and objectives of the General Plan and the "Growth Management Element."	Adopted by city council in April 1991; replaced and incorporated into the *Growth Management Program Implementation Manual* in 2015.
6. "Growth Management Oversight Commission" Ordinance (Ch. 2.40 *of Chula Vista Municipal Code*)	Outlines functions, duties and regulations of the GMOC. It is supplemented by Ch. 2.25, described in no. 8, below.	Adopted by city council in May 1991 and last amended in 2011.
7. "Growth Management" Ordinance (Ch. 19.09 of *Chula Vista Municipal Code*)	Legally establishes threshold standards, administration, and compliance requirements and mechanisms.	Adopted by city council in 1991 and last amended in 2015.
8. "General Rules for Boards and Commissions" (Ch. 2.25 of the *Chula Vista Municipal Code)*	Outlines membership and operations information for city commissions, including the GMOC. It supplements Ch. 2.40, described in no. 6, above.	Adopted by city council in 2008 and last updated in 2011.
9. "Growth Management Oversight Commission's Annual Report"	Updates planning commission and city council re: status of threshold standards compliance, identifies concerns, makes recommendations.	2014 Annual Report presented to planning commission and city council May 2014. Available online.
10. "Annual Residential Growth Forecast" and Agency Responses	Prepared by city staff with developer input, includes historical data and projected number of building permits to be issued over the next five years. It is used to assist city departments and outside agencies to evaluate possible threshold compliance issues.	2015 Forecast published in September 2014 and distributed to city departments and outside agencies that monitor threshold standards. Included in Appendices to each GMOC Annual Report and available online.
11. Facility Master Plans	Based on the General Plan, provide plans and preliminary design specifications for various major infrastructure and facilities to ensure threshold compliance at build-out.	Completed and periodically revised since 1987 by individual city departments. See page 20 for a list.
12. Air Quality Improvement Plans	Provide an analysis of air pollution	Required with all SPA Plans, TMs

Document	Function	Status
	impacts and a means of improving air quality for development proposals.	and development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater. See Appendix A for preparation requirements.
13. Water Conservation Plans	Provide an analysis of water usage and a plan of conservation measures.	Required with all SPA Plans, TMs and development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater. See Appendix B for preparation requirements.
14. Public Facility Financing Plans (PFFPs)	Identify cost, financial responsibility, and proposed financing method for each public facility, and a phasing plan to ensure threshold compliance during project construction.	Required with all SPA Plans, TMs and development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater. See Appendix C for preparation requirements.
15. Fiscal Impact Analyses (FIA)	To estimate the impact of a development or a land use change on the costs and revenues to the city associated with the development. Developments must have a positive fiscal impact, or provide backstop funding for any negative years.	Required with all SPA Plans and TMs, and for the following, subject to the discretion of the Development Services Director: development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater.
16. *Growth Management Program Implementation Manual*	Sets out the procedures and establishes requirements for how the Growth Management Program is administered, including how growth management policies integrate with other aspects of development regulation, finance, and municipal operations.	Adopted by city council in 2015, it incorporates and replaces both the prior *Threshold Standards and Growth Management Oversight Commission Policy* and the *Growth Management Program* documents.

A. Growth Management Program Documents

1. *Threshold Standards and Growth Management Oversight Commission Policy*

(Adopted by the City Council in November 1987)

The *Threshold Standards and Growth Management Oversight Commission Policy* ("Policy") established Chula Vista's Growth Management Program, identifying goals, objectives, threshold standards, and

implementation measures for eleven topics, and outlining responsibilities of the Growth Management Oversight Commission. The eleven topics identified include: Air Quality, Drainage, Fiscal, Fire and Emergency Services, Libraries, Parks and Recreation, Police, Schools, Sewer, Transportation and Water. The information was updated and subsequently incorporated into the *Chula Vista Municipal Code* (chapters 2.40 and 19.09), which were most recently updated in 2011 and 2015, respectively, and replaces the Policy document. See item 7, below, for more discussion on threshold standards.

2. "Controlled Residential Development" Ordinance (aka the "Cummings Initiative"), Chapter 19.80 of the *Chula Vista Municipal Code* (1988)

In 1988, Chula Vista voters adopted the Cummings Initiative (Initiative), which is codified in the *Chula Vista Municipal* Code as Chapter 19.80, entitled "Controlled Residential Development." It directed the city council to ensure that the city's *General Plan* had a "Public Services and Facilities" element and that developers, after receiving discretionary approvals for any development project, participated in the timely construction and financing of facilities, and that city council should expend all funds collected solely for the purpose for which they were advanced. It also directed the city to "adopt such further ordinances, resolutions, policies, or procedures consistent with the purposes, intents and requirements of the ordinance," which resulted in adoption of the city's "Growth Management" ordinance (Chapter 19.09 of the *Chula Vista Municipal Code*) in 1991.

The Initiative included the finding that intense residential development was adversely affecting the health, safety and welfare of the citizens of Chula Vista, and that its purpose was to better plan for and control the rate of residential growth in the city and to preserve quality of life. It also establishes that rezoning of property designated for residential development outside of Planned Community (PC) zoned areas could only be permitted to the next highest residential density category in any two-year period (for example, RE, R1, R2, R3).

3. "Growth Management Element" of Chula Vista's *General Plan*

(Adopted by City Council April 17, 1990 and updated in 2005)

The purpose of the "Growth Management Element" is "to describe the various components that, together, create the overall Growth Management Program that guides future development in the City." The *General Plan's* "Growth Management Element" also provides the policy framework for Chula Vista's Growth Management Program, whose overall goal is "To direct and coordinate growth and development in ways that maintain, and consistently endeavor to improve, the quality of life for current and future residents of Chula Vista."

The *General Plan* establishes the vision of the type of community Chula Vista will become, and the "Growth Management Element" serves as a guide to assure that the vision is achieved, without sacrificing the quality of life enjoyed in the community; it contains the tools to allow the development patterns described in the "Land Use and Transportation Element" to take place over time. It considers capacities and generation rates described in the "Public Facilities and Services Element" and supporting documents to establish standards for new development, redevelopment and revitalization. It recognizes the importance of resources described in the "Environmental Element" and the

contribution they make to the overall quality of life enjoyed by existing and future residents. Where applicable, cross-references are provided in the "Growth Management Element" to identify where interrelationships with other *General Plan* elements exist.

4. "Public Facilities and Services Element" of Chula Vista's *General Plan*
(Adopted by City Council April 17, 1990 and updated in 2005)

The purpose of the "Public Facilities and Services Element" is to establish the city's plan to provide and maintain infrastructure and public services for future growth, without diminishing services to existing development. Public facilities collectively refer to utilities, such as water, sewer, drainage, power and telecommunications services, and to infrastructure such as parks and recreation centers, schools, libraries, fire stations and police stations. Public services collectively refer to delivery of services such as law enforcement and fire protection and to other services that support and enrich the community, such as art and cultural facilities and programs, childcare opportunities, and health and human services. California state law does not require this element in the city's *General Plan*; however, it permits a general plan to include other elements and subjects that relate to the physical development of a city and subjects that relate to quality of life. Once an optional element has been adopted, it carries the same legal force and effect as a mandatory element.

5. *Growth Management Program* (Adopted by City Council April 23, 1991)

The *Growth Management Program* (Program) document, along with the "Growth Management Element" of the *General Plan* and the "Growth Management" ordinance, created a comprehensive system to manage future growth. The Program established a foundation for carrying out the development policies of the city by directing and coordinating future growth in order to guarantee the timely provision of public facilities and services, with primary focus being on the area east of Interstate 805.

The Program reviewed the goals and objectives of the *General Plan* and the "Growth Management Element" and how the goals and objectives were met. It also:

- Outlined the function and responsibilities of the Growth Management Oversight Commission;
- Provided overviews of the different community planning areas, describing the existing development process and the status of specific development projects for planning purposes;
- Discussed each of the eleven topics with adopted threshold standards;
- Provided a description of the various components of the overall phasing policy, proposed specific development phasing policies, and presented a development phasing forecast;
- Provided an overview of finance, discussing the existing finance approaches being used and listed the various methods available to finance public facility improvements;

- Summarized the key components of implementation, describing threshold standards, facility master plans, project processing requirements, the development phasing policies/forecast, the GMOC, pacing of development, prioritizing projects, financial management and proposed finance policies, and the organizational structure necessary to operate the program; and

- Provided a summary of the current status of the facilities in relation to threshold standard compliance, as reported in the second annual report by the GMOC.

The information in the *Growth Management Program* was updated and incorporated into this *Growth Management Program Implementation Manual*, which replaces the *Growth Management Program* document.

6. "Growth Management Oversight Commission" Ordinance, Chapter 2.40 of the *Chula Vista Municipal Code* (Adopted by City Council May 7, 1991 and last updated in 2011)

According to the ordinance, the city council's purpose and intent in establishing the Growth Management Oversight Commission was to "create an advisory body to provide an independent annual review of the effectiveness of the *General Plan* regarding development issues," using "threshold criteria to make determinations regarding the impact of development on the 'quality of life' in Chula Vista; publish findings; and make recommendations thereon."

Chapter 2.40 also outlines functions and duties, membership and meeting schedule information for the GMOC. One of the duties of the GMOC is to prepare an annual report, as described in no. 9, below. This ordinance is supplemented by *Chula Vista Municipal Code* Chapter 2.25, described in no. 8, below.

7. "Growth Management Ordinance" Chapter 19.09 of the *Chula Vista Municipal Code* (Adopted by City Council May 28, 1991 and last updated in 2015)

Consistent with the *General Plan's* "Growth Management Element" and in order to protect the public health, safety and welfare, the "Growth Management" ordinance accomplishes the following:

A. Ensures that public facilities, infrastructure, and services continuously meet threshold standards and are provided in advance of or concurrently with the demands created by new development;
B. Assures that individual development projects measure potential impacts upon public facilities, infrastructure and services and provide a plan for funding improvements needed to meet threshold standards;
C. Limits or prevents additional development if public facilities, infrastructure, and services improvements meeting established threshold standards are not provided in a timely and logical fashion;
D. Controls the timing and location of development by tying the pace of development to the provision of public facilities and improvements to conform to the goals and objectives of the *General Plan*, the threshold standards, and procedures set forth in the *Growth Management Implementation Manual*; and

E. Promotes revitalization and redevelopment of older portions of the city, including the "Urban Core" area and the commercial corridors.

The "Growth Management" ordinance sets forth the basis of the procedures involved with growth management, including both the monitoring of threshold standards and related regulatory actions and the imposition of growth controls. Its purpose is to ensure that, as new development occurs, public facilities, infrastructure and services will concurrently be provided to meet the demands generated by new development, and that service levels to existing residents will not be reduced. Therefore, it establishes requirements (in accordance with the *General Plan*) and specifies goals, objectives, threshold standards, and implementation measures for eleven topics, including: Air Quality, Drainage, Fiscal, Fire and Emergency Medical Services, Libraries, Parks and Recreation, Police, Schools, Sewer, Transportation and Water.

- Each goal describes a desired condition or "end state", while the objectives represent measureable steps toward achieving the goal.
- Threshold standards are levels of service or maintenance standards, adherence to which will achieve the objectives and goal.
- Implementation measures are those techniques that will be used to encourage or enforce maintenance of the threshold standards. These are the actions the city can take to preserve the current quality of life while development progresses. Three key implementation measures can be applied: Issuance of a "Statement of Concern"; Adopt and fund tactics; and Development Moratorium.

Statement of Concern

A Statement of Concern is an implementation tool that may be used by the Growth Management Oversight Commission in its annual report, should the GMOC determine that a potential problem exists with respect to any of the threshold standard topics.

- When issued for an externally controlled threshold standards (e.g. Water, Schools, Air Quality), the Statement of Concern will highlight what action the city and/or other agency can take in order to solve the specified issue and encourages further or additional inter-agency cooperation/coordination. There may also be a recommendation to issue correspondence or a resolution by the city council to the external agency if the situation so warrants, as determined by the GMOC and city council.
- When issued to a city department regarding a current or forecasted failure of a threshold standard, the Statement of Concern may include elements dealing with city management, organization and budget priorities.
- When issued in response to an overall or general quality of life consideration, irrespective to whether a particular threshold standard has been exceeded, or if it is a non-growth-related issue, the Statement of Concern can offer a finding, or make recommendations regarding city management, organization and budget priorities.

Adopt and Fund Tactics

Capital, operational, or program elements may be identified as needing to be established in order to correct a current or future threshold issue or deficiency.

Development Moratorium

The "Growth Management" ordinance provides that the city council may, by ordinance, at their discretion or on the basis of recommendations provided by the GMOC, make specific findings and impose a causal moratorium on the issuance of building permits in the city. This limitation, consistent with the provisions of the "Growth Management" ordinance, must be directly related to a cause associated with non-compliance of threshold standards and may be for the entire city or a designated sub-area. Any such growth limitation would endeavor to minimize unintended consequences and would be balanced and equitable. The moratorium would specify the corrective action(s) to address the problem and a time frame for resolving the failure. See section IV.B.10 "Building Permit Moratorium" for additional information.

Table 2, below, identifies the review mechanism and implementation measure associated with threshold compliance for each of the eleven topics.

TABLE 2 – SUMMARY OF THRESHOLD STANDARDS

	Application/Timing		***Implementation Measures***		
Topic	***Project Level Conformance Review by Staff***	***Annual City-wide Conformance Review by GMOC***	***"Statement of Concern" to Council***	***Plan of Action Timing Benchmarks Finance Plan***	***Public Hearing Considering Moratorium to Achieve Conformance***
Fire/EMS	*X*	*X*	*X*		*X*
Police		*X*	*X*		*X*
Traffic	*X*	*X*	*X*		*X*
Parks/ Recreation	*X*	*X*	*X*	*X*	*X*
Drainage	*X*	*X*	*X*	*X*	
Libraries		*X*	*X*		*X*
Air Quality		*X*	*X*		
Fiscal	*X*[1]	*X*	*X*		

	Application/Timing		Implementation Measures		
Schools	*X*[2]	*X*	*X*		
Sewer	*X*	*X*	*X*		
Water	*X*	*X*	*X*		

[1]Fiscal Impact Analyses required for SPA Plans, or projects of 50 units or more, or equivalent for non-residential projects.
[2]Required for SPA Plans, or projects of 50 units or more. Not applicable for non-residential projects.

The Growth Management Program implements the threshold standards through five procedural steps:

A. Determining the regulatory requirements to be imposed upon discretionary development projects as defined by various state and local regulatory laws and rules and the growth management threshold standards;

B. Applying these requirements when conducting discretionary review of individual project proposals and modifying project proposal and/or applying appropriate mitigation measures;

C. Requiring a financing and phasing plan that assures the required public improvements will be adequately funded, pay for themselves, and be available when needed;

D. Providing an annual review by a citizen commission (the GMOC) on the status of the city's quality of life, how the growth management program is functioning to meet its stated objectives, and to issue recommendations to the city council regarding findings related to meeting growth related threshold standards and the growth management program in general; and

E. Providing the city council with the opportunity to take growth management actions needed to preserve, protect, and enhance the quality of life for current and future residents of the city.

8. "General Rules for Boards and Commissions" Ordinance, Chapter 2.25 of the *Chula Vista*

(Adopted by City Council in 2008 and last updated in 2011*)*

This ordinance supplements the "Growth Management Oversight Commission" ordinance described in no. 6, above. It goes into greater detail regarding membership, attendance requirements, ethics, compensation, operations, vacancies, etc. for all city commissions, including the GMOC.

9. Growth Management Oversight Commission's Annual Report

Chapter 2.40 of the *Chula Vista Municipal Code* requires that the GMOC prepare an annual report for the city council regarding the current and potential future compliance status of the quality of life threshold standards. The report is intended to serve as a basis for recommending changing the capital investment program, making changes to city organization and management, engaging in interagency

cooperation, and imposing development restrictions or other actions to assure that the threshold standards and related quality of life in the city are sustained. The report:

- Assesses the accomplishments and deficiencies of the Growth Management Program over the last year;
- Makes determinations as to whether each of the Growth Management Program's threshold standards have been met during the review cycle;
- Comments on the likely future compliance status of each of the threshold standards, for up to five years;
- Identifies issues and concerns related to growth management and quality of life;
- Prepares recommendations to the city council related to threshold standard compliance, which may include: city management and organizational changes; capital investments; budgetary and fiscal matters; areas needing interagency cooperation; and need to restrict or reduce the rate of growth; and
- Recommends changes or additions to growth management threshold standards and their respective implementing actions.

One of the tools used to acquire information for the annual report is the *Annual Residential Growth Forecast* and responses from agencies, described below.

10. *Annual Residential Growth Forecast* and Agency Responses

The *Annual Residential Growth Forecast* (Forecast) is prepared in the first quarter of each fiscal year by city staff. It includes historical information, as well as the number of building permits projected to be issued each year over the next five years. The projections are based on disclosures from developers and builders regarding residential projects that have been or are undergoing the entitlement process, and could potentially be approved and permitted for construction within the next five years. These projects are under the city's control with respect to the standard entitlement process time frames. As such, the projections do not reflect market conditions outside the city's control and do not represent a goal or desired growth rate. They represent a "worst-case" or more liberal estimate to assess maximum possible effects to the city's threshold standards. Using more aggressive development figures in the forecast allows the city and service providers to evaluate the maximum potential effect on maintaining quality of life, and the ability to provide concurrent development of necessary public facilities and services.

The Forecast is distributed to the city departments and outside agencies that monitor the Growth Management Program's threshold standards. Each department and agency is asked for the compliance status of the relevant threshold(s), and any future compliance issues relative to the level of projected growth. The responses of the city departments and other agencies are then assembled and presented to the Growth Management Oversight Commission as part of the Commission's annual review activities.

11. Facility Master Plans

Facility master plans are the means by which public facilities (such as libraries and fire stations) and services are planned for future adequacy at build-out.

Adopted by city council, these plans are prepared by applicable city departments and periodically updated. They contain assumptions regarding existing and projected land uses and development projections, and identify specific facilities that will serve the build-out of future development, along with phasing and cost estimates. Development Impact Fees and other associated funding programs are established based on the needs identified in the master plans. The operating departments may also develop "strategic plans" that outline service demands and how these demands will be met. The city also regularly interfaces with the water districts, school districts and the Air Pollution Control District when they prepare their master plans and facility needs analyses.

Future development proposals utilize facility master plans to determine the adequacy of specific facilities and to demonstrate compliance with the adopted threshold standards. A development proposal must be consistent with these various facility master plans, which currently include:

- Libraries Strategic Vision Plan (April 8, 2014) and Strategic Facility Plan (April 8, 2014)
- Fire and Emergency Medical Services Master Plan (2014)
- Parks and Recreation Master Plan (Draft December 2010)
- Circulation Element of the *General Plan* (Updated in 2013)
- Bikeway Master Plan (February 1, 2011)
- Pedestrian Master Plan (June 15, 2010)
- Greenbelt Master Plan (September 16, 2003)
- Wastewater Master Plan (July 2014)
- Drainage Master Plan (2004)

12. Air Quality Improvement Plans

Air Quality Improvement Plans (AQIPs) analyze air pollution impacts that would result from development of proposed projects, and define methods for mitigating development impacts and improving air quality. To enhance opportunities to improve air quality and energy conservation, Section 19.09.050(B) of the *Chula Vista Municipal Code* requires AQIPS for: 1) all major development projects of 50 dwelling units or greater; 2) commercial and industrial projects with 50 equivalent dwelling units (EDUs) of air quality impacts or greater; and 3) all Sectional Planning Area (SPA) Plans and Tentative Maps (TMs). The specifics for preparing AQIPs are attached in Appendix A.

13. Water Conservation Plans

In order to reduce future water consumption for approved development proposals, Section 19.09.050(C) of the *Chula Vista Municipal Code* requires Water Conservation Plans (WCPs) for: 1) all major development projects of 50 dwelling units or greater; 2) commercial and industrial projects with 50 EDUs or greater; and 3) all SPA Plans and TMs. The plans must include detailed information, such

as: a project description, identification of water service and supply, projected water use, and implementation measures. The specific requirements are attached in Appendix B.

14. Public Facility Finance Plans

Public Facility Finance Plans (PFFPs) detail infrastructure and service requirements for particular projects and indicate how the improvements will be phased and funded to ensure continued compliance with threshold standards as development proceeds. They are the critical link between the threshold standards and development entitlements. When specific thresholds are projected to be reached or exceeded based upon the analysis of the proposed phased development of the project, the PFFP prescribes specific timing benchmarks for delivery of new infrastructure and services necessary for continued compliance with the Growth Management Program and threshold standards.

Per Section 19.09.080 of the *Chula Vista Municipal Code*, PFFPs are required for all SPA Plans and TMs, and may be prepared at various times in the development review process. Instructions and requirements for preparing PFFPs are outlined in Appendix C.

15. Fiscal Impact Analyses

The purpose of fiscal impact analysis (FIA) is to estimate the impact of a development or a land use change on the expenditures and revenues to the city for serving the development. The analysis is generally based on the fiscal characteristics of the community land values, needed facilities and services, etc. The analysis enables the city to estimate the difference between the costs of providing services, such as police and fire services, park maintenance, etc., to a new development and the revenues (taxes and user fees, for example) that will be generated by the development.

Because a FIA is primarily based on an analysis of city revenues and expenditures, key players conducting an assessment include the Director of Finance, the county tax assessor, and typically a consultant to gather information and to prepare the analysis.

The city's Finance Department maintains the current FIA models that applicants must use. Two models exist. One is used for large-scale analysis of build-out conditions, such as for *General Plan* level analysis. The other is used for individual projects, such as SPA plans and Tentative Maps, which evaluate conditions throughout the project's phased implementation. At the discretion of the Development Services Director, a FIA may be required for development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater. Also, FIAs may be required for individual projects within SPA plans if they propose amendments to the *General Plan*, *General Development Plan* or SPA.

Projects must be fiscally positive, and the "Growth Management" ordinance (Chapter 19.09 of the *Chula Vista Municipal Code)* requires offsets for any negative years.

16. *Growth Management Program Implementation Manual*

Adopted by city council in 2015, the *Growth Management Program Implementation Manual* ("Manual") incorporates and replaces both the *Threshold Standards and Growth Management Oversight Commission Policy* and the *Growth Management Program* documents. It provides direction for implementing the city of Chula Vista's Growth Management Program, outlined in the "Growth Management Element" of the city's General Plan and in its "Growth Management" ordinance (Chapter 19.09 of the Chula Vista Municipal Code). The Manual sets out the procedures for how the *Growth Management Program* is administered, including how growth management policies integrate with other aspects of development regulation, finance, and municipal operations.

TABLE 3 – GROWTH MANAGEMENT-RELATED REGULATORY PROGRAMS

Growth Management-Related Regulatory Programs	Function	Status
1. Growth Management Oversight Commission	Monitors and guides the Growth Management Program, prepares annual report on threshold standards compliance.	Established pursuant to the 1987 *Threshold Standards and GMOC Policy*, and updated in Chapter 2.40 of the *Chula Vista Municipal Code* adopted by city council in 1991 and amended in 2011.
2. Development Impact Fees (DIF) and other Funding Mechanisms	Provide financing for development-related infrastructure improvements.	Originally adopted in 1986 for Eastlake and extended to the eastern area in 1998. The transportation development impact fee (TDIF) has expanded to western Chula Vista. Updated in accordance with updated facility master plans, and periodically for changes in conditions or construction costs.
3. Capital Improvement Program (CIP)	To fund new infrastructure and/or to increase the useful life or value of the city's physical assets or existing infrastructure. The CIP funds infrastructure not otherwise required to be built by developers.	Updated annually looking out one and five years.
4. Community Facilities Districts (CFDs), Assessment Districts (ADs) and Bonds	A special taxing authority that may be formed to finance certain designated public services and capital facilities by levying special taxes which are continuing liens levied against real property within the service area.	The city has numerous CFDs, particularly in eastern Chula Vista, covering facilities such as schools, drainage, and open space maintenance. Levies are periodically reviewed and updated.
5. Intergovernmental	An agreement between agencies to	The City has agreements with the

Growth Management-Related Regulatory Programs	Function	Status
Agreements	upgrade services, consolidate resources and save money.	city of San Diego for dispatching fire services, the San Diego Metropolitan Wastewater District for sewage treatment capacity, and San Diego County for shared sewer lines in portions of the city of Chula Vista.
6. Development Review Process	Technical studies, PFFPs and conditions of approval are used to evaluate and ensure projects comply with the threshold standards and related requirements.	In the PC zone, the threshold standards are integrated into the development review process in a 3-tiered manner: General Development Plan (GDP), SPA & PFFP/FIA and Tentative Map.
7. Environmental Analysis	Compliance with threshold standards is analyzed through environmental review of development projects consistent with state law (California Environmental Quality Act or "CEQA").	Conducted on all discretionary proposals deemed to be "projects" under CEQA; some result in preparation of Environmental Impact Reports (EIRs).
8. Development Agreement	An optional contract between the city and a developer to specify standards and conditions governing property.	The city has development agree-ments for property associated with Otay Ranch, including Millenia.
9. Traffic Monitoring Program (TMP)	The collection of traffic monitoring data (traffic volume and travel times) carried out under a variety of programs and used to determine level-of-service (LOS) performance pursuant to the Traffic threshold.	The city routinely monitors traffic at specific intersections and along select roadway corridors identified on the TMP's Arterial Segments Map.
10. Building Permit Moratorium	City council may, by ordinance, impose a limit on building permits if specific findings are made. Limits are to avoid exacerbation of a problem until threshold compliance issue is remedied.	Used only on a case-by-case basis, if determined necessary by city council in a public hearing.

B. Growth Management-Related Regulatory Programs

1. Growth Management Oversight Commission

As outlined in Chapter 2.40 of the *Chula Vista Municipal Code*, the Growth Management Oversight Commission (GMOC) consists of nine citizens appointed by the city council and represent four geographic areas in the city (southwest, southeast, northwest, and northeast), four interest areas (education, business, development, and environmental), and a representative from the planning

commission. The purpose of the GMOC is "to provide an independent annual review of the effectiveness of the *General Plan* in regard to development and growth-oriented issues; to make determinations in regard to the impact of development on the quality of life in Chula Vista, using the threshold standard criteria; and to publish findings and make recommendation on the same." In addition, the GMOC looks at facility master plans, development activity, financing plans for constructing new facilities, development phasing, and other growth management issues.

The city provides secretarial support and a liaison who serves as lead staff support and contact for the GMOC, acts as facilitator for functioning the commission, and writes reports, including the annual report that evaluates compliance of threshold standards and makes determinations regarding the impact of development on the quality of life within the city.

The GMOC's review is structured around three timeframes:

- A Fiscal Year Cycle (July 1 – June 30) to accommodate city council review of GMOC recommendations that may have budget implications;
- The period after June 30 until completion of the annual report to address pertinent issues identified during this timeframe, and to assure that the GMOC can and does respond to current events; and
- A five-year forecast, beginning in the first quarter of the fiscal year and ending in December five years later to assess potential threshold compliance concerns.

2. Development Impact Fees and Other Funding Mechanisms for Public Facilities

Development Impact Fees (DIFs) are one-time charges applied to new developments. Their purpose is to raise revenue for the construction or expansion of capital facilities located either within or outside the boundaries of the new development, and to benefit the contributing development. Impact fees are assessed and dedicated principally for the provision of additional sewer systems, roads, libraries, fire stations and parks and recreation facilities made necessary by the presence of new residents in the area. The funds collected cannot be used for operation, maintenance, repair, alteration or replacement of capital facilities. Below is a list of established DIF funds as of Fiscal Year 2014-15:

- Eastern Transportation TDIF
- Western Transportation TDIF
- Traffic Signal
- Telegraph Canyon Drainage
- Telegraph Canyon Gravity Sewer
- Poggi Canyon Sewer Basin
- Salt Creek Sewer Basin
- Pedestrian Bridges (Otay Ranch Villages 1, 2, 5, 6, 11 and Millenia)
- Public Facilities (Administration, Civic Center Expansion, Police Facility, Corp. Yard Relocation, Libraries, Fire Suppression Systems, Recreation Facilities)

Chula Vista originally adopted DIFs in 1986 for the Eastlake master planned community and subsequently adopted DIFs for all of eastern Chula Vista in 1998. Typically, the DIFs are updated in accordance with updated Facility Master Plans, and on a periodic basis to reflect changes in construction costs, etc.

The terms for collection of Development Impact Fees are outlined in various authorizing ordinances. Fees are generally to be paid upon the issuance of building permits for each development project within the city of Chula Vista, except that, at the discretion of the City Manager, prepayment arrangements may be made. Also, whenever a developer is required to construct or finance a facility that services more than just the demands of their project (such as a portion of a major roadway), procedures are followed to receive DIF credit or reimbursement.

There are a number of financing options available for developer obligated capital improvements, including the following:

- **Cash/Pay-as-You-Go Financing**: In this method the city charges the development community a series of fees that provide the source of income to pay for capital improvement projects. Once enough cash has been collected the city constructs the next capital project in order of its priorities.

- **Reimbursement Agreements:** The city may, under certain circumstances, be asked by a developer to reschedule a project to an earlier date and to construct the facility before funds have been collected under the pay as you go or fee system. When this occurs, the city adopts a policy of having the interested developer construct the project based on a reimbursement agreement. The city pays the developer back for the portion of the project that was to be funded by city resources when funds are available. The use of this method of project financing does not eliminate the developer's obligations to pay city fees associated with their specific development project.

- **Credit for City Fees**: When the city determines that the public interest is served by a developer constructing certain public facilities earlier than possible under a pay as you go program the city can consider giving the developer credit for fees that would otherwise be paid at building permit issuance. These credits would reduce the amount of fees payable in future years from a certain development. The use of fee credits is carefully examined to avoid reducing the amount of available funds necessary to build other capital improvements. Options exist when considering fee credits in the following areas:

    - **Full fee credit immediately**: Under this alternative, the developer who builds a public improvement is eligible to deduct 100 percent of the cost of this improvement from the required city fees. Once the fee credit is exhausted the developer begins paying fees as normally assessed by the city. Under this option the developer gets immediate credit for the total cost of the project.

- **Full fee credit over time**: Under this alternative the developer who builds a public improvement receives credit for the cost of the public improvement. However, the use of the credit is spread over a number of years or payments. This would allow the city to continue receiving some fees while at the same time crediting the developer for partial fee payments

- **Debt Financing:** The city has a maximum special tax of 1% of the sales price of new properties, as of the date of close of escrow. The statewide ad valorem property tax rate is also 1%. Some of the other debt financing options available are described below.

3. Capital Improvement Program

The city's Capital Improvement Program is the annual council-approved compilation of all of the capital improvement projects designed to foresee and address the city's future capital needs.

A Capital Improvement Project (CIP) is a public infrastructure project that increases the useful life of the city's physical assets or infrastructure and/or adds to their value. Specific funding is granted by city council.

Implementation of CIPs may have a direct effect on threshold compliance. For example, CIPs to lengthen turn lanes or to add extra travel lanes may be necessary to improve traffic flow so that it will comply with the level of service that meets the traffic threshold standard. Recommendations in GMOC annual reports can, and have in the past, resulted in proposed CIPs to remedy issues such as these.

4. Community Facilities Districts, Assessment Districts and Bonds

Various special districts within the city collect fees, which are used for capital improvements defined within their capital improvement programs. A Community Facilities District (CFD), such as a Mello-Roos district, is a special taxing authority that may be formed to finance certain designated public services and capital facilities by levying special taxes which are continuing liens levied against the real property within the service area.

- **Mello Roos Community Facilities Act of 1982:** The Mello Roos Community Facilities District Act provides governmental entities with the ability to finance infrastructure through the creation of a special tax as allowed by section 4 of Article XIIIa of the State Constitution. This special tax may be created with the approval of two-thirds of the property owners based on the amount of property owned or registered voters based on one vote per person if more than twelve registered voters reside within the district. A Mello Roos district may finance a wide variety of facilities, including schools. Libraries, parks, streets and civic buildings. The act generally provides that a governmental entity, a city a school or a joint powers authority may use a Mello Roos district to finance any facility that the legislative body for that government is empowered to construct.

Capital facilities that may be funded by a CFD include: police and fire protection stations, open space improvements, cultural facilities, and elementary and secondary schools. CFDs also fund maintenance for a range of facilities and open space districts.

An Assessment District may be formed by the city when it embarks on a public works project — such as a new road or a sewer system upgrade — to raise the funds needed to cover the expense. It is a specially designated area encompassing properties that stand to benefit from a particular improvement.

- **Assessment Districts**: Assessment districts generally fall into the Municipal Improvement Act of 1913 Division 12 of the Streets and Highways Code of the State of California and the Improvement Act of 1915 is Division 10 of the Streets and Highways Code. The city may use assessment districts to assist the developer in the construction of various public improvements that may be financed through either the use of a 1913 or 1915 assessment district. There must be a significant public benefit from this improvement to use these districts.

Property owners in Assessment Districts collectively pay in proportion to their share of benefits received. Usually, the type or amount of use on the property and the size of the lot will determine the amount due. The resulting assessment will appear as part of the property owner's tax bill. These special taxes occur over the course of several years, because homeowners are actually repaying bonds sold by the city to finance the project. Since the life of a bond issue is an average of 15 to 20 years, special assessments do not disappear quickly. Due to Proposition 218, however, California State law now requires that property owners who would benefit from a public improvement — and thus pay for it — approve the creation of the Assessment District. State law also allows for the formation of special benefit districts.

- **Special Benefit Districts**: State law allows for the formation of a variety of special benefit districts. These districts may be used to fund the construction of parks, libraries, police or fire facilities and street lighting systems, to name just a few. These districts are formed by a vote of the property owners who are assessed for the cost of improvements. The developer and or land owner bears the burden of debt service payments. City participation in a district of this type must be in proportion to the construction for which the city is responsible.
- **New Revenue Bonds:** The city may elect to issue revenue bonds to finance improvements related to utility functions or other city services that generate a fee for service. If the public improvements are being installed ahead of the expected schedule to accommodate the developer, the developer must offset many of the costs of issuing the revenue bonds.
- **Certificates of Participation:** Certain public facilities such as buildings can be financed through certificates of participation. This is in effect a lease agreement between the city and another agency. A developer wishing to move projects forward might consider constructing facilities such as a library, park, or fire station using this finance tool.

- **General Obligation Bonds:** The city can issue general obligation bonds to fund the construction of public improvements. As required by state law, this can only be accomplished with the approval of two-thirds of the voters in an election. General obligation bonds can probably best be used in the older portions of the city. They provide facility improvements in areas where there is no new development to provide facilities.

5. Intergovernmental Agreements

Most intergovernmental agreements are made to upgrade services, consolidate resources and save money. They can be made between or among a broad range of governmental or quasi-governmental entities, such as a city and a county or a city and a school district. A typical intergovernmental agreement might involve a contract between two small cities to share police, fire and paramedic services. Intergovernmental agreements can improve services, save money through economies of scale, and lead to a culture of inter-community cooperation in many areas

The city currently has an intergovernmental agreement with the city of San Diego for dispatching fire services, the San Diego Metropolitan Wastewater District for sewer capacity, and San Diego County for shared sewer lines in portions of the city of Chula Vista.

6. Development Review Process

Integration of the Growth Management Program into the development review process varies from projects in the Planned Community (PC) zone and projects not in the PC zone. The approach for each is explained below.

<u>Development in PC Zone</u>

The Growth Management Program's threshold standards are integrated into the city's development review process of large-scale projects, or those in the Planned Community (PC) zone, in a three-tiered manner, as shown on Table 4.

- Tier 1 involves preparation of a General Development Plan, which establishes the basic land use and development policies. Initial environmental review is completed, which provides a framework for subsequent environmental review and actions.
- Tier 2 involves preparation of a detailed Sectional Planning Area Plan and a corresponding Public Facilities Finance Plan, consistent with the requirements of the "Growth Management" ordinance. The SPA and the PFFP are the basis of land development standards and infrastructure requirements, along with any related Development Agreement entitlements and responsibilities.
- Tier 3 involves creating the Tentative Map and meeting key requirements, such as establishment of financing mechanisms and assurances that threshold standards can be met as development is actually occurring.

TABLE 4 – THREE-TIERED DEVELOPMENT REVIEW PROCESS

	Tier 1 General Development Plan and Environmental Analysis	**Tier 2** Sectional Planning Area Plan and Public Facilities Finance Plan	**Tier 3** Tentative Map
Threshold Standards and CEQA Review	Tests feasibility of project at build-out per threshold standards and analyzes environmental impacts	Demonstrates consistency of each phase with threshold standards	Project must guarantee conformance to threshold standard prior to building
Public Facilities Requirements	Allocates project share of public facilities at build-out	Locates and describes public facilities needed for each phase	Construction of public facilities guaranteed
Financing of Facilities	Identifies financing options	Identifies cost, financial responsibility, and proposed financing method for each public facility	Specific financing mechanisms established

This approach has served the city well in managing expansion in eastern Chula Vista.

Development Outside of PC Zone

A different approach to regulation has been established to encourage and manage desirable development and redevelopment in western Chula Vista, given the unique development challenges faced in this area. This regulatory approach relies upon the preparation of city-sponsored specific plans and corresponding PFFPs. The western Chula Vista regulatory framework accounts for the smaller size of urban infill projects and the financial hurdles often facing infill and redevelopment projects (e.g., parking, hazardous materials remediation, etc.) and the related need for public investments.

7. Environmental Analysis

California Environmental Quality Act (CEQA) review is conducted on all discretionary proposals deemed to be "projects" under CEQA; some result in preparation of Environmental Impact Reports (EIRs) or Mitigated Negative Declarations (MNDs). The process of analyzing a development project's impact on public services, consistent with CEQA, involves determining compliance with "thresholds of significance". Such thresholds may be actual GMP thresholds or a combination of GMP thresholds and other requirements from the General Plan, MSCP, etc.

8. Development Agreement

A development agreement is a regulatory tool that can be used to provide, enhance or advance a Capital Improvement Project. It is an elective contract between the city and a developer and specifies the standards and conditions that will govern the development of the property and provide assurance to the developer that they may proceed to develop the project subject to the rules and regulations in effect at the time of approval – generally, the development will not be subject to subsequent changes in regulations. For instance, a current agreement between the city and a developer stipulates that "If city amends its 'Growth Management' ordinance, the amended 'Growth Management' ordinance shall apply to the project upon master developer's written acceptance by a clarification pursuant to…, which acceptance shall not constitute an amendment to this agreement. This provision shall not affect any mitigation measures required of master developer under the environmental document certified for the project."

The agreement should also benefit the city and may include conditions (mitigation measures) that must be met to assure that a project at a specific location does not have unacceptable impacts on neighboring properties or community infrastructure. The agreement may clarify how the project will be phased, the required timing of public improvements, the developer's contribution toward funding system-wide community improvements, and other conditions. The agreement can also facilitate enforcement of requirements, since it is a contract that details the obligations of the developer and the city.

9. Traffic Monitoring Program

The city's engineering department has various methods of monitoring level-of-service (LOS) (physically driving or remote sensing) at key intersections and along corridors throughout the city on an annual basis. An "Arterial Segments" map defines the location and length of roadways to be measured for compliance, and each year findings are reported on arterial segment maps that show the LOS (A-F) for three time periods of the day: AM Peak, Mid-Day Peak and PM Peak. The Growth Management Oversight Commission reviews this information in determining whether or not traffic in the city is in compliance with the traffic threshold standard.

10. Building Permit Moratorium

As provided in the city's "Growth Management" ordinance (section 19.09.070 of the *Chula Vista Municipal Code*), the city council has the ability to adopt an ordinance imposing a limit on building permits for construction of residential and/or non-residential development after making one or more of the following findings in regard to health, safety and welfare:

- That continued development will make it unlikely for the intent of the Growth Management Program to be achieved, as expressed by the "Growth Management" element of the *General Plan* and this chapter.

- That continued development will cause deterioration of the city's quality of life, and compromise the health, safety and welfare in the city of Chula Vista.
- That continued development will strain the city's fiscal resources and ability to deliver high quality services to all of its residents.

Limits are imposed to avoid exacerbation of a problem until threshold compliance issue is remedied. If the city council makes the necessary required findings to impose a limit on building permits, then it shall adopt an ordinance that specifies:

- Area where the moratorium applies;
- Duration of the moratorium (when it begins and ends);
- Any exemptions or exceptions or conditions. These shall be consistent with the overall objectives of the city action and broader land use policy. Exemptions could include "affordable" housing units (units sold or rented at below market rates to meet the city's Housing Element requirements). Exceptions might include units that have been allocated as part of a separate agreement (e.g., a development agreement);
- Any conditions that would allow the moratorium to be lifted prematurely; and
- How the building permits shall be allocated.

V. Administering the Growth Management Program

Administering Chula Vista's Growth Management Program is led by the city's Development Services Department as a part of the overall development review process; however, administration is a joint effort by other city departments, the Growth Management Oversight Commission, the planning commission and the city council.

A. City Staff Responsibilities

As illustrated in Figure 2, city staff activities include monitoring threshold standards, forecasting growth-related impacts, reviewing and conditioning development projects, reviewing compliance with PFFPs, tracking and monitoring development, and preparing the GMOC's annual report. The city attorney provides oversight and assistance, and many departments contribute their technical expertise.

1. Tracking Development

City staff tracks development to monitor growth, track timely implementation of Public Facility Financing Plans (PFFPS) phasing requirements and other SPA Plan or Tentative Map conditions relative to maintaining compliance with threshold standards. Tables are updated monthly to show the number of single-family and multi-family units at each stage of project implementation: SPA Plan, Tentative Map, Final Map, Building Permit Issued and Occupancy.

2. Threshold Compliance Reports

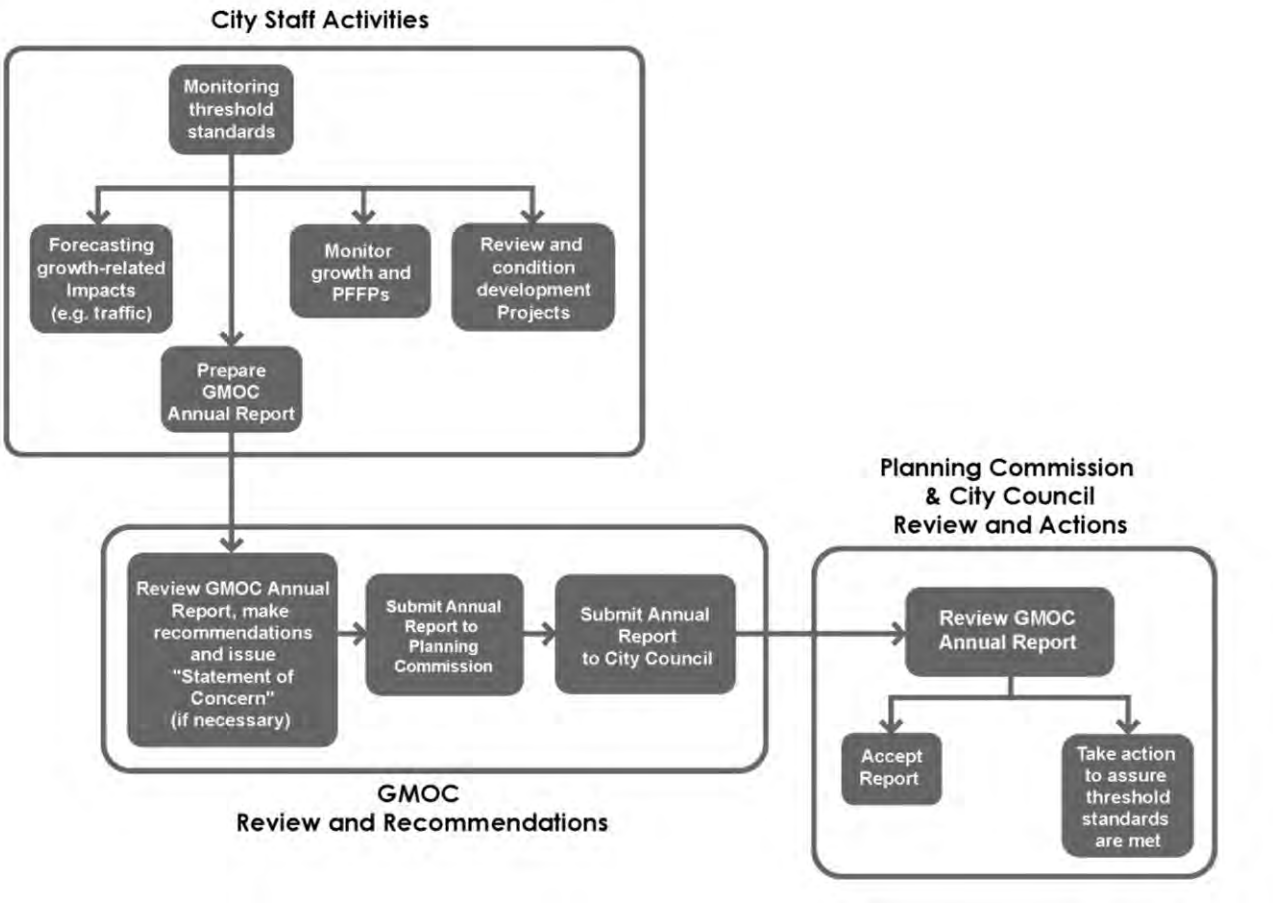
Staff also tracks and prepares threshold compliance reports for Police and Fire response times, and Traffic's level of service. Threshold compliance reports are also submitted by staff on an annual basis for Air Quality, Drainage, Fiscal, Libraries, Parks and Recreation and Sewer.

3. GMOC Support

The Development Services Department currently provides administrative, technical and clerical staff support for the GMOC. City staff tasks include, but are not limited to, the following:

- In the first quarter of each fiscal year, preparing a residential growth report containing a 5-year development forecast, running from the first quarter of the fiscal year through December five years later.
- Scheduling an annual organizational meeting of the GMOC for the purpose of electing a chair and vice-chair, and setting the schedule for the current review cycle.
- Providing administrative and clerical support to the GMOC for its meetings, and in the preparation of its annual report.
- Advising the GMOC on technical and policy matters.
- Requesting information from city departments and outside agencies, as may be necessary, for the GMOC to adequately perform its function.
- Providing responses to GMOC requests for information related to their evaluation of threshold standard compliance and other related requests, as reasonable, and in a timely manner. This may include attending one or more GMOC meetings, in addition to providing written information.
- Assisting the GMOC as it prepares its annual report, providing technical assistance and production.
- Scheduling a publicly noticed joint workshop with the GMOC, planning commission and city council to present the annual report to the decision-making bodies for their consideration of findings and recommendations included in the report and in a "Recommendation/ Implementing Actions Summary." Any actions from the planning commission and city council are accomplished by resolution.
- After the planning commission and city council have acted on the GMOC's annual report, ensuring that any policy changes directed by the city council are returned to the city council in the form of a draft resolution initiating the recommended policy changes. The resolution and a related staff report are intended to be a ready and thorough reference for the public, city staff, developers and decision-makers documenting the changes needed are implemented.

FIGURE 2 – IMPLEMENTING ROLES AND RESPONSIBILITIES



B. Growth Management Oversight Commission Responsibilities

The functions and duties of the Growth Management Oversight Commission are outlined in Chapter 2.40 of the *Chula Vista Municipal Code* and discussed in sections IV.A.3. "Growth Management Oversight Commission Annual Report" and IV.B.9 "Growth Management Oversight Commission."

C. Planning Commission and City Council Responsibilities

The planning commission shall annually appoint a member from the planning commission to serve as a GMOC commissioner. The GMOC's Annual Report shall be submitted to both the planning commission and the city council to discuss findings and recommendations, and to request, by resolution, acceptance of the report at a joint workshop/public hearing, to be held before adoption of the budget each year. The planning commission may comment on the findings and recommendations and shall, by resolution, make a recommendation to the city council, who shall take action.

Both the planning commission and the city commission are also responsible for reviewing documents and programs associated with development including, but not limited to: SPA Plans, PFFPs, EIRs, Financial Impact Analyses and Development Impact Fees.

AIR QUALITY IMPROVEMENT PLAN (AQIP) GUIDELINES

I. Introduction

Community and site design features and environmentally conscious building practices can have a substantial effect on air quality emissions and energy consumption. In recognition of this, the City of Chula Vista has been progressive in its approach to advancing the practices of energy conservation and reduction of greenhouse gas emissions. This is evident through the City's Growth Management Ordinance (CVMC 19.09), Carbon Dioxide (CO2) Reduction Plan, Climate Change Working Group (CCWG) Implementation Measures, and Green Building and Increased Energy Efficiency Ordinances (CVMC 15.12, and 15.26.030, respectively). These programs promote energy conservation and reduction of greenhouse gas emissions by requiring applicants to implement the best available community site design practices such as providing alternative modes of transportation, transit-friendly, walkable communities, and sustainable building design.

The City's Growth Management Ordinance, requires an Air Quality Improvement Plan (AQIP) to be submitted with all Sectional Planning Area (SPA) Plans or major development projects consisting of 50 dwelling units or greater (or non-residential or mixed use projects with equivalent dwelling units (EDUs) to a residential project of 50 or more dwelling units). As required by Growth Management Ordinance, the AQIP shall provide an analysis of air pollution impacts which would result from the project, and will be required to demonstrate the best available design to reduce vehicle trips, maintain or improve traffic flow, reduce vehicle miles traveled, including implementation of appropriate traffic control measures, and other means of reducing emissions (direct or indirect) from the project.

To further enhance opportunities to improve air quality and energy conservation, applicable action measures contained in the City's Carbon Dioxide (CO2) Reduction Plan must also be addressed in the AQIP. The City's CO2 Reduction Plan was adopted in late 2000 and establishes a strategy for the City to reduce energy consumption, promote alternative transportation and design transit-friendly, walkable communities. As part of the AQIP, applicants will be required to demonstrate how their project was designed to help implement the action measures contained in this plan.

In addition, although not required for AQIPs, at the time a building permit application is submitted, the developer/applicant will be required to comply with the provisions of the City's Green Building and Increased Energy Efficiency Standards, CVMC 15.12 and 15.26.030 respectively. These standards focus on implementing environmentally friendly construction practices and materials, and improving building energy conservation above current California State Title 24 Energy Code requirements. The environmentally conscious planning efforts developed in conjunction with the project's AQIP will facilitate compliance with CVMC 15.12 and 15.26.030 and expedite the building permit process.

Through the AQIP, applicants must demonstrate how their project has been designed consistent with each of these programs and thus represents the best available design in terms of improving energy efficiency and reducing greenhouse gas emissions. These guidelines have been developed to provide direction in the preparation of AQIPs.

II. City Requirements for AQIPs

A. Sectional Planning Area Plans, Tentative Maps, and Other Major Projects

In accordance with the City's Growth Management Ordinance (19.09), the developer/applicant shall prepare and submit an AQIP with applications for all SPA Plans, Tentative Maps, or for any major development projects that meet the following criteria:

- Residential projects of 50 dwelling units or greater.
- Commercial projects of 12 or more acres (or equivalent square footage).
- Industrial projects of 24 or more acres (or equivalent square footage).
- Mixed Use projects with a cumulative threshold equal to that of 50 residential dwelling units or greater (refer to Attachment A, Exhibit 1 for examples of AQIP equivalent dwelling unit determinations).

As described further below, the AQIP must include a qualitative and quantitative analysis of the proposed project to demonstrate how the project has met the City's thresholds for reducing air quality impacts and improving energy conservation. Key components of the AQIP will address:

- Air pollution impacts from project.
- Project efficiency through quantitative project evaluation.
- Community and site design features.
- Eligibility requirements to receive energy efficiency credit toward CVMC 15.26.030.

Additional details regarding AQIP requirements and format are provided in Attachment A: Required Content and Format for Air Quality Improvement Plans.

III. AQIP Format and Structure

As noted above, the key components of the AQIP must address: air pollution impacts of the proposed project, quantitative project evaluation through modeling, community and site design features, and eligibility requirements receive energy efficiency credit. Each of these key topic areas is further discussed below.

A. Summary of Air Pollution Impacts

The Applicant shall summarize the effect of the project's mobile and stationary emission sources on local and regional air quality. It is expected that this section will focus on highlighting the findings contained in the air quality impact analysis prepared as part of the project's respective Environmental Impact Report (EIR). This section of the AQIP must address the following:

" Federal, State, and Local rules and regulations related to assessing air quality impacts.
" Project's mobile and stationary emission sources and related criteria pollutants (including those associated with short-term construction and long-term implementation).
" Effect of project emissions on local and regional air quality.
" A summary of CEQA Mitigation Measures that will be implemented to reduce the project's effect on air quality.

B. Quantitative Project Design Evaluation

The Applicant(s) shall perform a quantitative analysis through one of two computer-modeling options in order to demonstrate that the project has met the City's required thresholds for community design considerations such as land use mix, street system connectivity, and pedestrian network. The primary means to accomplish this is through an INDEX PlanBuilder (INDEX) model developed specifically for the City (Option 1). As an alternative to the INDEX program, Developers/Applicants have the option to use other modeling tools similar to INDEX provided that the results can be translated to clearly demonstrate compliance with the City's established thresholds (Option 2). A summary of each of the two options is provided below.

(1) Option 1: INDEX PlanBuilder

INDEX is an interactive GIS-based planning tool designed to assist in community planning by evaluating proposed community/site designs against a set of performance standards. Applicants choosing this option shall have their project evaluated against a set of 'Key Indicators' that measure the performance characteristics of the project in relation to required minimum baseline scores. An INDEX program has been developed specifically to model major projects in Chula Vista through a required set of Key Indicators focusing on air quality and energy efficiency. The Key Indicators that will be measured through the INDEX model are presented in Table 1. Definitions for each of the Key Indicators and the minimum scores for each are provided in Attachment A, Exhibit 2.

TABLE 1: List of INDEX Key Indicators

INDEX Key Indicators	
■ Land-Use Use Mix	■ Intersection Density
■ Land-Use Use Balance	■ Pedestrian Network Coverage
■ Neighborhood Completeness	■ Residential Multi-Modal Access
■ School Proximity to Housing	■ Residential Building Energy Use
■ Transit Proximity to Housing	■ Non-Residential Building Energy Use
■ Park Proximity to Housing	■ Residential Building CO2 Emissions
■ Internal Street Connectivity	■ Non-Residential Building CO2 Emissions
■ Transit Proximity to Employment	■ Daily Auto Driving (Density, Diversity, and Design)

1. VMT: Vehicle Miles Traveled

The Applicant is responsible for the costs of retaining the consultant to perform the INDEX modeling services and may choose to either 1) enter into a three-party agreement with the City and the consultant providing the INDEX modeling services or, 2) contract directly with the consultant providing the INDEX modeling services. Additional details describing the timing of the modeling efforts, and required format of project information the Applicant will need to provide in order to run the INDEX model is provided in Attachment B.

(2) Option 2: Alternative Modeling Programs

As an alternative to the INDEX model, applicants may choose an alternative compliance program modeling software such as LEED ND, Community Viz, or PLACE3S, among possible others, provided that the results address the topics on the Key Indicators List (Table 1), and can be translated to clearly demonstrate equivalent compliance with the minimum threshold scores established through INDEX for each of the required Key Indicators. AQIPs prepared through alternative modeling programs must summarize the modeling results in a format comparable to that generated through INDEX. Refer to Attachment A, Section II.7.5 for additional requirements pertaining modeling Option 2.

Applicants choosing to model their project through a program other than INDEX are responsible for the costs of retaining a consultant to perform the necessary modeling services. Applicants may choose to either: 1) enter into a three-party agreement with the City and the consultant providing the alternative modeling services or, 2) contract directly with the consultant providing the quantitative modeling services. If the applicant chooses to contract directly with the consultant, the applicant will be required to submit a deposit to the City for third party peer review of the modeling outputs to ensure consistency with the thresholds established through INDEX.

(3) Compliance with City Required Modeling Thresholds

In order to deem the proposed project consistent with the City's adopted strategies for improving air quality and energy conservation, the project must demonstrate at or beyond the City's performance threshold scores for each key indicator as shown in Table A-1 of Attachment A. If the initial modeling results indicate that the project does not satisfy the City's minimum performance thresholds, the Developer/Applicant shall refine/redesign the project accordingly, and have it reevaluated through the applicable model until consistency with the established performance thresholds has been achieved.

In the event that a project is unable to reasonably comply with all key indicator thresholds due to unique circumstances involving project land use make up, design, and/or pre-existing environmental/land-use conditions, the Developer/Applicant may request, in writing to the City's Development Services Director (or their designee), a waiver from those particular key indicators. The written request must substantiate the reasons why the indicator thresholds cannot reasonably be met. The discretion to waive performance requirements for certain key indicators from project evaluation rests exclusively with the City's Development Services Director (or their designee).

C. Community Design/Site Planning Features

(1) Use of Smart Growth Principles

The AQIP shall provide a qualitative discussion describing the effect community design can have on air quality in terms of site planning, transportation, and energy efficiency. The focus of this discussion is to elaborate the on the specific project features that were used in conjunction with the quantitative modeling requirements. The discussion should be project specific, referencing as appropriate, acreages, unit counts, distances, etc. A list of typical design features with general definitions will not be acceptable. Applicants that incorporate smart growth design features targeted at reducing vehicle miles traveled (VMT) are more likely to receive favorable scores during the initial quantitative modeling, thus reducing the potential for additional modeling efforts. Some examples of commonly recognized principles of smart growth projects are provided in Attachment A, Exhibit 3.

(2) Project Consistency with CO2 Reduction Plan

The AQIP shall provide a comparative evaluation of the project's community/site design and other features and how these serve to implement the applicable action measures contained in the City's Carbon Dioxide (CO2) Reduction Plan. Details regarding report content and format as well as a listing of the action measure to be evaluated are provided in Attachment A, Section II.7.7.

(3) Compliance Monitoring

The applicant shall provide a checklist to track and monitor implementation of all contributing aspects (mitigation measures, site/project design features, credit options) of the approved AIQP following the entitlement process. In order to track compliance with the project features contained in the AQIP, the checklist shall indicate the method and timing of verification, along with the responsible party to ensure the project features described in the AQIP are sufficiently implemented. A sample checklist format is provided in Attachment A, Section II.7.9.

IV. Credit Option for Building Energy Efficiency Ordinance Requirements

The following discussion is intended for informational purposes only. Detailed provisions related to the calculation and application of credits are currently under development and subject to subsequent review and approval of City Council.

As noted in the introduction, under the City's Energy Efficiency Ordinance (CVMC 15.26.030), all new buildings must exceed minimum energy efficiency requirements under the State's current 2008 Title 24 Energy Code. This includes future buildings in SPA Plan areas with AQIPs prepared pursuant to these AQIP Guidelines. In recognition that community design and other planning considerations made at the SPA level contribute to overall energy savings in new development, new SPA Plan areas (those approved subsequent to the adoption of Energy Efficiency Ordinance) may be granted a partial credit toward meeting the more stringent building energy efficiency requirements under CVMC 15.26.030, if the SPA Plan conforms to a set of progressive community/site design threshold standards evaluated as part of the AQIP.

If the results of the additional quantitative modeling do not meet the progressive set of qualifying thresholds, the applicant must modify the project design in order to meet the qualifying scores, or the credit cannot be granted. Applicants that are successful in demonstrating that their SPA Plan or project has met the qualifying energy savings thresholds will be eligible to receive the energy savings credit at the time of building permit. Following the successful completion of the progressive modeling, the City's Development Services Director (or their designee) shall issue a written communication to the applicant confirming that the project is eligible to receive an energy savings credit towards compliance with CVMC 15.26.030. The applicant shall include this letter as part of the building permit application at which time the credit can be applied as appropriate.

ATTACHMENT A

Required Content and Format for Air Quality Improvement Plans

The following outline has been developed to direct the content and format of Air Quality Improvement Plans (AQIPs) prepared for all major projects residential projects (i.e., 50 or more dwelling units). Equivalent dwelling unit determinations for non-residential or mixed use projects with equivalent dwelling units (EDUs) to a residential project of 50 or more dwelling units are provided in Exhibit 1. Please note that the Section numbers have been predetermined in order to accommodate the formatting requirements for Sectional Planning Area (SPA) Plans. Major project's that do not require the preparation of a SPA Plan shall apply a conventional numbering system.

II.7.1 Executive Summary

This section of the AQIP shall provide a brief summary describing the intent of the AQIP, the project's goal with regards to community site design, specific planning features incorporated to achieve project goals, and the effectiveness of community design as demonstrated through preliminary modeling of the proposed project.

II.7.2 Introduction

This Section of the AQIP shall describe the need to prepare an AQIP pursuant to the City's Growth Management (CVMC 19.09.050B) and how the AQIP has been prepared based on best available design practices which, in turn, will serve to implement several of the key aspects of the City's CO2 Reduction Plan and Green Building and Energy Efficiency Ordinances, CVMC 15.12 and 15.26.030 respectively.

II.7.2a. Purpose & Goals

This section will describe the purpose of providing an Air Quality Improvement Plan. Provide a brief explanation of the regulatory framework identifying the authority and scope of the various Federal, State, and Local jurisdictions with regards to improving air quality, increasing energy efficiency, and CO2 reduction. As it pertains to local plans and policy, the AQIP shall describe how the project fulfills the City's commitment to improving air quality through compliance with the City's Growth Management Ordinance, Carbon Dioxide (CO2) Reduction Plan, and adopted Green Building and Increased Energy Efficiency Standards.

II.7.3 Project Description

The project description shall include land use information, acreage, number of housing units, unit types and mixed-use areas. The project description shall include a Site Utilization Plan illustration from the SPA Plan document or similar site plan illustration for those projects that do not file a SPA Plan.

II.7.4 Effect of Project on Local/Regional Air Quality

This section shall provide a generalized discussion on the proposed projects potential short-term and long term effects on local and regional air quality, including the projects contribution to global climate change or global warming. The discussion shall describe the project's mobile and stationary emission sources and related criteria pollutants (including those associated with short-term construction and long-term implementation), effect of project emissions on local and regional air quality, and community/site design features and mitigation measures that have been developed to reduce the projects effect on air quality.

II.7.5 Quantitative Project Evaluation

Option 1: INDEX PlanBuilder (INDEX)

This section of the document shall summarize the results of the INDEX modeling performed for the project. The section shall contain a written description of the project attributes that were considered in the modeling and the effect each of them had in terms of improving air quality, and reducing energy consumption and CO2 emissions. This discussion shall be supplemented with a table (refer to Table A-1 below) comparing the project's INDEX scores to the threshold scores for each Key Indicator. Definitions for each of the INDEX key indicators is provided in Exhibit 2.

ATTACHMENT A

TABLE A-1: Summary of Quantitative Modeling Results

Element	Indicator	Units	Threshold Score[1]	SPA Plan Score	Compliance Status Y/N
Land Use	Use Mix	0-1 scale	0.10	-	-
	Use Balance	0-1 scale	0.60	-	-
	Neighborhood Completeness	% of key uses	60	-	-
Housing	School Proximity to Housing	avg walk ft to closest	3,200	-	-
	Transit Proximity to Housing	avg walk ft to closest stop	2,900	-	-
Employment	Transit Proximity to Employment	avg walk ft to closest stop	2,600	-	-
Recreation	Park Proximity to Housing	avg walk ft to closest park	1,700	-	-
Travel	Internal Street Connectivity	cul-de-	0.70	-	-
	Intersection Density	intersections/sq mi	210	-	-
	Pedestrian Network Coverage	% of streets w/sidewalks	81.0	-	-
	Residential Multi-Modal Access	%DU w/3+ modes w/i 1/8 mi	40.0	-	-
	Daily Auto Driving (3Ds Methodology)	VMT/capita/day	22.0	-	-
Climate Change	Residential Building Energy Use	MMBtu/yr/capita	29.0	-	-
	Non-Residential Building Energy Use	MMBtu/yr/emp	19.0	-	-
	Residential Building CO2 Emissions	lbs/capita/yr	4,800	-	-
	Non-Residential Building CO2 Emissions	lbs/emp/yr	3,100	-	-

Notes: 1. The threshold scores have been rounded from the INDEX baseline neighborhood composite scores.

Option 2: Alternative to INDEX

As noted in the AQIP Guidelines, developers/applicants have the option to run an alternative program such as LEED ND, Community Viz, PLACE3S, etc. provided that the results can be translated to clearly demonstrate equivalent compliance with thresholds established through INDEX for each of the required Key Indicators. AQIPs prepared through alternative modeling programs must summarize the modeling results in a format similar that which is described in Table A-1 and contain an equivalency spreadsheet demonstrating, to the satisfaction of the Director of Development Services, that the that energy and air quality improvements have been achieved consistent with the thresholds established through INDEX.

11.7.6 Community Design and Site Planning Features

This section shall describe the effect the project's community design and site planning features have on air quality in terms of transportation, energy efficiency, and CO2 reduction. The focus of this discussion is to describe the specific strategies that have been integrated into the project to create a sustainable community; highlighting those project attributes designed to reduce air quality impacts through a combination of site design features intended to promote walking and alternate travel modes (transit, bikes, etc.), reduce vehicles miles traveled and improve energy conservation. It is expected that this discussion be project specific, referencing as appropriate, acreages, unit counts, residential proximity to schools, transit facilities, parks, etc. Providing a generic list of community design and site planning features will not be accepted.

For projects located within Otay Ranch, additional information related to the Otay Ranch General Development Plan (GDP) implementing policies and how they can reduce CO2 emissions is provided in Appendix C of City's CO2 Reduction Plan.

II.7.7 Chula Vista CO2 Reduction Plan

This section the document shall provide a comparative evaluation between the project's community/site design features and the energy efficiency and emission reduction action measures contained in the City's Carbon Dioxide (CO2) Reduction Plan. The following table (Table A-2) contains action measures as identified in the CO2 Reduction Plan and shall be included in each AQIP to demonstrate how the project has been designed to help implement the action measure listed in the City's CO2 Reduction Plan. (Note: Action measures 1-5, and 17 will be implemented by the City and are not included in the table and do not need to be addressed in the AQIP.)

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TABLE A-2: Summary Project Consistency with CO2 Reduction Action Measures

Action Measure	Project/Community Design Features	Describe how project design will Implement CO2 Reduction Action Measures
Measure 6 (Enhanced Pedestrian connections to Transit): Installation of walkways and crossings between bus stops and surrounding land uses.		
Measure 7 Increased Housing Density near Transit: General increase in land use and zoning designations to reach an average of at least 14-18 dwelling units per net acre within ¼ mile of major transit facilities.		
Measure 8 (Site Design with Transit Orientation): Placement of buildings and circulation routes to emphasize transit rather than auto access; also includes bus turn-outs and other transit stop amenities.		
Measure 9 (Increased Land Use Mix): Provide a greater dispersion/variety of land uses such as siting of neighborhood commercial uses in residential areas and inclusion of housing in commercial and light industrial areas.		
Measure 10 (Reduced Commercial Parking Requirements): Lower parking space requirements; allowance for shared lots and shared parking; allowance for on-street spaces.		
Measure 11 (Site Design with Pedestrian/bicycle Orientation): Placement of buildings and circulation routes to emphasize pedestrian and bicycle access without excluding autos; includes pedestrian benches, bike paths, and bike racks.		
Measure 12 (Bicycle Integration with Transit and Employment): Provide storage at major transit stops and employment areas. Encourage employers to provide showers at the place of employment near major transit nodes.		
Measure 13 (Bike Lanes, paths, and Routes): Continued implementation of the City's bicycle master plan. Emphasis is to be given to separate bike paths as opposed to striping bike lanes on streets.		
Measure 14 (Energy Efficient Landscaping): Installation of shade trees for new single-family homes as part of an overall city-wide tree planting effort to reduce ambient temperatures, smog formation, energy use, and CO2.		
Measure 15 (Solar Pool Heating): Mandatory building code requirement for solar heating of new pools or optional motorized insulated pool cover.		
Measure 16 (Traffic Signal & System Upgrades): Provide high-efficiency LED lamps or similar as approved by the City Engineer.		
Measure 18 (Energy Efficient Building Recognition Program): Reducing CO2 emissions by applying building standards that exceed current Title 24 Energy Code requirements.		
Measure 20 (Increased Employment Density Near Transit): General increase in land-use and zoning designations to focus employment-generating land-uses within ¼ mile of major transit stops throughout the City.		

ATTACHMENT A

II.7.8 Credit Towards Increased Minimum Energy Efficiency Standards

Detailed provisions related to the calculation and application of credits are currently under development and subject to subsequent review and approval of City Council.

II.7.9 Compliance Monitoring

This section of the AQIP shall provide a written description and a checklist summarizing the project design features and mitigation measures that have been identified to reduce the projects effects on air quality and improve energy efficiency. The following checklist shall be completed with input provided by the City and included in the project AQIP to ensure the project features described in the AQIP are sufficiently implemented:

TABLE A-3: Compliance Monitoring Checklist

[insert project title]		**Air Quality Improvement Plan Compliance Monitoring Checklist**					
	Method of Verification[1]	Timing of Verification				Responsible Party [2]	Project Consistency & Compliance Documentation[3]
		TM	Pre Cons.	Cons	Post Cons.		
Planning							
AQIP Project Design Features/Principles							
-							
Mitigation Measure							
-							
Building							
Green Building Standards							
-							
Energy Efficiency Standards							
-							

Notes:
1. Method of verification may include, but is not limited to, plan check, permit review, site inspection.
2. Identify the party responsible for ensuring compliance (City of Chula Vista, San Diego APCD, Other)
3. This column shall include all pertinent information necessary to confirm compliance including document type, date of completion, plan/permit number, special notes/comments, and contact information.

ATTACHMENT A - EXHIBIT 1

Examples of AQIP Equivalent Dwelling Unit Determinations

The City's Growth Management Ordinance, requires an Air Quality Improvement Plan (AQIP) to be submitted with all Sectional Planning Area (SPA) Plans or major development projects consisting of 50 dwelling units or greater (or non-residential or mixed use projects with equivalent air quality impacts to a residential project of 50 or more dwelling units). The following equivalencies apply to non-residential or mixed-use projects:

- Commercial projects of 12 or more acres (or equivalent square footage). Applying typical height and site development standards from the City's commercial zones, equivalent building square footage for a 12-acre commercial project is 210,000 square feet.
- Industrial projects of 24 or more acres (or equivalent square footage). Applying typical height and site development standards from the City's industrial zones, equivalent building square footage for a 24-acre industrial project is 420,000 square feet.
- Mixed Use projects with a cumulative threshold equal to that of 50 or more residential dwelling units. Using the example calculations provided below, mixed use projects with a score greater than 1.0 will be required to prepare an AQIP pursuant CVMC 19.09.050B.

Example Mixed Use Calculations:

Example 1: Proposed Mixed-Use Project	Equivalency Calculation
Residential: 20 dwelling units	20/50 = 0.4
Commercial: 8 acres	8/12 = 0.67
Industrial: 0 acres	0/24 = 0
	Total 1.07 (Score > 1.0: AQIP Required)

Example 2: Proposed Mixed-Use Project Equivalency Calculation	
Residential: 10 dwelling units	10/50 = 0.2
Commercial: 8 acres	8/12 = 0.67
Industrial: 0 acres	0/24 = 0
	Total 0.87 (Score < 1.0: AQIP Not Required)

Example 3: Proposed Mixed Use Project Equivalency Calculation	
Residential: 0 dwelling units	0/50 = 0
Commercial: 5 acres	5/12 = 0.67
Industrial: 18 acres	18/24 = 0.75
	Total 1.16 (Score > 1.0: AQIP Required)

ATTACHMENT A - EXHIBIT 2

INDEX Indicator Definitions

ELEMENT	INDICATOR	DEFINITION
Land Use	Use Mix	Proportion of mixed or dissimilar developed land-uses among a grid of cells of user-defined size, expressed on a scale of 0 to 1. Includes vertical dissimilarity in mixed-use cells.
	Use Balance	Proportional balance of developed land-uses, by land area, expressed on a scale of 0 (low) to 1 (high).
	Neighborhood Completeness	Percent of the following key uses present inside the SPA: 1) fire/police station, 2) library, 3) park, 4) school, and 5) general retail opportunities.
Housing	School Proximity to Housing	Average walk distance from all dwellings to closest designated school.
	Transit Proximity to Housing	Average walk distance from all dwellings to closest designated transit stop.
Employment	Transit Proximity to Employment	Average walk distance from all businesses to closest designated transit stop.
Recreation	Park Proximity to Housing	Average walk distance from all dwellings to closest public or private park.
Travel	Internal Street Connectivity	Ratio of street intersections versus intersections and cul-de-sacs or dead-ending streets.
	Intersection Density	The number of street intersections per square mile.
	Pedestrian Network Coverage	Percent of total street frontage with improved sidewalks on both sides.
	Residential Multi-Modal Access	Percent of dwellings within 1/8 mi. of three or more travel modes (bike, car, transit, or walk).
	Daily Auto Driving (3Ds Methodology)	Average daily vehicle miles traveled per capita. Threshold value is used as the baseline score; proposed SPA plan value calculated from 3D Methodology indicator elasticities.
	**Street Network Density*	*Density of streets in centerline miles per square mile.*
	**Pedestrian Network Coverage*	*Percent of total street frontage with improved sidewalks on both sides.*
	**Street Route Directness*	*Weighted average ratio of shortest drivable route distance versus straight-line distance, from residents and employees of developed parcels to central node destination.*
Climate Change	Residential Building Energy Use	Annual MMBtu per capita for residential structural energy use. Units in MMBtu/yr/capita.
	Non-Residential Building Energy Use	Annual MMBtu per employee for retail, office, and general commercial building operations energy use. Units in MMBtu/yr/emp.
	Residential Building CO2 Emissions	CO2 pollution emitted from residential buildings, including operations and embodied CO2. Units in lbs/capita/year.
	Non-Residential Building CO2 Emissions	CO2 pollution emitted from retail, office, and general commercial buildings, including operations and embodied CO2. Units in lbs/capita/year.

ATTACHMENT A - EXHIBIT 3

Commonly Recognized Principles and Practices of Smart Growth

EXAMPLES SMART GROWTH	DESCRIPTIONS
Transit-oriented development (TOD)	Encouraging transit travel by developing moderate-to high-density housing, shopping, and employment centers at key access points along a regional transit system, with enhanced pedestrian access.
Transportation Options (Multi-model Streets)	Design streets to create balance for all modes of transportation, including pedestrians, bicyclists, vehicles and public transit
Mixed-use development	Development that locates complementary land uses such as housing, retail, office, services, and public facilities within walking distance of each other. This can include both vertical mixing (such as residential above shops) as well as horizontal.
Pedestrian-oriented development.	Providing a combination of land use and urban design elements that encourage and make people want to walk thereby creating pedestrian oriented neighborhoods.
Developing concentrated activity centers	Encouraging pedestrian and transit travel by creating "nodes" of high density mixed development, that can be more easily linked by a transit network
Strengthening downtowns:	Encouraging pedestrian and transit travel by making central business districts concentrated activity centers that can be the focal point for a regional transit system
Sustainable Design	Incorporate "Green Building" and/or energy efficiency techniques that can have a positive effect on building sustainability and resource conservation.
Jobs/housing balance	Reducing the disparity between the number of residences and the number of employment opportunities by directing employment developments to areas with housing, and vice versa.
Landscape Design	Incorporate landscaping in a manor that reduces heat islands and energy costs by providing shading and improves air quality by reducing/filtering common air pollutants (i.e. carbon sequestering).

The smart growth strategies listed above are commonly recognized by organizations such as the Environmental Protection Agency (EPA), Urban Land Institute (ULI), National Association of Home Builders (NAHB), San Diego Association of Governments (SANDAG), and the Smart Growth Network. The Applicant may apply comparable principles and techniques from alternative sources that are deemed acceptable by the City. Additional information, fact sheets, case studies, and publications related to current smart growth design practices is available through the following organizations:

EPA: http://www.epa.gov/smartgrowth
SANDAG's "Designing for Smart Growth", January 2009: http://www.sandag.org
NAHB: http://www.nahb.org
ULI: http://www.uli.org/CommunityBuilding/RegionalLeadershipandCooperation/Smart%20Growth.aspx
Smart Growth Network: http://www.smartgrowth.org

ATTACHMENT B

INDEX Modeling Information and Administrative Procedures

Step 1: City Review of Project Submittal

Prior to initiating any quantitative modeling, the City shall review of the applicant's project submittal to ensure that the project represents the best available design to improve air quality and energy efficiency consistent with the City's Growth Management Ordinance, Municipal Code Section 19.09.050B, Carbon Dioxide (CO_2) Reduction Plan, and Green Building and Increased Energy Efficiency Ordinances (CVMC 15.12, and 15.26.030, respectively). The City's initial review will focus primarily on community site design. Following the City's review, staff may suggest refinements to the proposal that may in turn result in more favorable modeling results.

Step 2: Consultant Contracting

The applicant shall have their project modeled in conjunction with the City's second review of the SPA Plan. The Applicant is responsible for the costs of retaining the consultant to perform the INDEX modeling services and may choose to either: 1) enter into a three-party agreement with the City and the consultant providing the INDEX modeling services or, 2) contract directly with the consultant providing the INDEX modeling services. If the applicant chooses to contact directly with the consultant, then the applicant will be required to provide the City with cash deposit for third party independent review.

Step 3: Submittal of Documents

As part of the second draft SPA Plan review, the applicant must submit, to the City, the following project information in GIS Shapefile:

IMPUT SHAPEFILE	DATA TYPE	IMPUT ATTRIBUTE
Case (neighborhood) Boundary	Polygon	Regional Population1
		Regional Employment2
Land Uses - (parcels)	Polygon	Land-Use Type
		Dwelling Unit Count
		Residential Population per DU (based DU type - MF or SF)
		Employment Count
		Employment Floor Area (sqft)
Pedestrian Routes - (streets + off road pedestrian trails; freeways & ramps excluded)	Line	None
Points of Interest	Point	Interest Group (central node, amenity - typically grocery or school)
Street Centerlines	Line	Street Group (functional class)
		Percent of Segment with Sidewalks
Supplementary Land Uses	Polygon	Parcels with multiple uses that include the following: parks, schoolyards, and open space.
Transit Routes	Line	Transit Group (bus, light rail, heavy rail)
		Route Number
Transit Stops	Point	Transit Group (bus, light rail, heavy rail)

Notes: 1,2. Regional census data can be obtained through SANDAG and must be provide through a separate spreadsheet.

ATTACHMENT B

Step 4: Verification of Required INDEX Input Attributes

Once the City has received electronic copies of all required project input attributes, the City will submit the project documentation to the consultant providing the INDEX modeling. The consultant will then review the submittal to verify that all required information has been provided and has been converted into a GIS format acceptable to run the INDEX model. Only after the City has received confirmation from the INDEX modeling consultant that all necessary material has been provided and is in the proper format, may the quantitative modeling may proceed.

Step 5: Quantitative Modeling

Based on the information submitted by the applicant, the consultant providing the INDEX modeling, will model the project thorough a selection of twenty key indicators that will measure the project's attributes and performance characteristics against the City's required minimum baseline scores. In order to deem the proposed project consistent with the City's adopted strategies for improving air quality and energy conservation, the project must demonstrate improvements at or beyond the City's performance threshold scores established for each of the key indicators.

If the initial modeling results indicate that the project does not satisfy the City's minimum performance thresholds, the applicant shall refine/design the project accordingly, and have it reevaluated through the model until consistency with the established performance thresholds has been achieved.

Step 6: Project Approval

Upon successful completion of the INDEX modeling, the consultant providing the INDEX Modeling services shall provide written confirmation to the City's Director of Development Services that the project as proposed represents improvements at or beyond the City's performance threshold scores established for each of the key indicators. In the event that a project is unable to comply with all key indicator thresholds do to unique circumstances involving project design and/or pre-existing environmental/land-use conditions, the Developer/Applicant may request, in writing to the City's Development Services Director (or their designee), a waiver to exclude those key indicators that, in the applicant's opinion, are not applicable to their project. The discretion to exclude certain key indicators from project evaluation rests exclusively with the City's Development Services Director (or their designee).

Water Conservation Plan Guidelines

Part One – General City Requirements

The City of Chula Vista Growth Management Ordinance, Municipal Code Section 19.09.050C, requires a Water Conservation Plan (WCP) to be submitted with all Sectional Planning Area (SPA) Plans. If a SPA Plan is not required, a WCP is required to be submitted with Tentative Subdivision Maps. The Growth Management Program further requires that a Water Conservation Plan be submitted for major development projects, defined as residential projects consisting of 50 dwelling units or greater, or commercial and industrial projects with 50 Equivalent Dwelling Units (EDU's) of water demand or greater. (See Part Six for an explanation of EDU's.)

The WCP shall provide an analysis of water usage requirements of the proposed project, as well as a detailed plan of proposed measures for water conservation, use of reclaimed water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance.

Part Two – Water Conservation Plan Outline

Water Conservation Plans shall be consistent with the format and content identified in the Water Conservation Plan Outline, Attachment A.

Part Three – Residential Water Conservation Measures

All residential projects subject to the WCP requirements shall provide the following conservation measures in all dwelling units as more particularly described in Attachment B:

a. Hot-Water Pipe Insulation.
b. Pressure Reducing Valves.
c. Water Efficient Dishwashers.
d. At least one outdoor water conservation measure from the Residential Water Conservation Measures list.
e. At least one additional water conservation measure from either the indoor or outdoor categories identified on the Residential Water Conservation Measures list.
f. Water conservation measures not found on the Residential Water Conservation Measures list may be proposed consistent with the provisions of Part Five below.

Part Four – Non-Residential Water Conservation Measures

All non-residential projects subject to the WCP requirements shall provide the following conservation measures as more particularly described in Attachment C:

a. Hot-Water Pipe Insulation.
b. Pressure Reducing Valves.
c. At least one outdoor water conservation measure from the Non-Residential Water Conservation Measures list.
d. At least one additional water conservation measure from either the indoor or outdoor categories identified on the Non-Residential Water Conservation Measures list.
e. Water conservation measures not found on the Non-Residential Water Conservation Measures list may be proposed consistent with the provisions of Part Five below.

Part Five – Future Water Conservation Technology and/or Measures

The Developer may submit a Water Conservation Plan containing alternate water conservation measures not found on the Residential and Non-Residential Water Conservation Measures list. The alternate water conservation measures must be accompanied by data confirming, to the satisfaction of the City, the water savings achieved by implementing the measures.

The Director of Planning and Building or his/her designee will evaluate in his/her discretion the alternate water conservation measures for consistency with the objectives of the Water Conservation Guidelines. Alternate water conservation measures may be approved through the review and approval process for the Water Conservation Plan.

Part Six – Using Equivalent Dwelling Units (EDU's) to Determine Water Conservation Plan Requirements for Non-Residential and Mixed Use Projects.

The following water demand equivalencies apply to non-residential or mixed use projects:

a. Commercial projects of 12 or more acres.
b. Industrial projects of 24 or more acres.
c. Mixed Use projects with a cumulative estimated water demand of 21,200 gallons per day.

The average daily water consumption per household as estimated by the American Water Works Association Research Foundation is 424 gallons per day (gpd). Major development projects are defined as projects that use the equivalent water demand for 50 residences, or 21,200 gallons per day.

Using an estimated water demand factor of 1785 gallons per day per acre for commercial land, and an estimated water demand factor of 893 gallons per day per acre for industrial land, a commercial site of 12 acres and greater and an industrial site of 24 acres and greater would be required to prepare WCP's.

For projects with more than one use, the threshold for requiring a Water Conservation Plan would be a cumulative estimated project water demand of 21,200 gallons per day, based on these factors as approved by the City.

Infill or redevelopment projects that provide information, to the satisfaction of the City, indicating the net water demand increase resulting from the proposed land use does not exceed 21,200 gallons per day will not be required to prepare a Water Conservation Plan.

Adopted May 27, 2003

Water Conservation Plan Outline
Attachment A

The following outline sets forth the format and content of the Water Conservation Plan (WCP). The Water Conservation Plan shall provide an analysis of water usage requirements of the proposed project, a detailed plan of proposed measures for water conservation, use of recycled water, and other means of reducing per capita water consumption from the proposed project, as well as defining a program to monitor compliance. All SPA Plans must incorporate the following numbering system consistent with the master planned communities SPA plan outline. For projects that do not require a SPA Plan a comparable numbering sequence is to be used. (e.g. II.8.1, II.8.2 replaced with 1., 2.)

SECTION II.8 WATER CONSERVATION PLAN

Table of Contents

Abbreviations, Terms and Water Equivalencies

II.8.1 Executive Summary

Provide a brief summary of the Water Conservation Plan. Particular emphasis is to be given to the water conservation measures identified for implementation in the project.

II.8.2 Introduction

Identify the project and list goals of the project's Water Conservation Plan.

II.8.3 Purpose

Describe the purpose of providing a Water Conservation Plan. Identify the authority and scope of the City of Chula Vista, State, and Federal regulations, where applicable. A brief explanation of how the project has addressed regulations is to be included.

II.8.4 Project Description

Project description including land use information, acreage, number of housing units, unit types and mixed-use areas. Include the Site Utilization Plan illustration from the Sectional Planning Area (SPA) Plan document.

II.8.5 Water Service and Supply

Identify the local water agency that will supply potable and recycled water to the project site.

II.8.6 Projected Water Use

Potable Water Demand
Summarize the potable water demand in a table based on land use type and projected residential density. Base the unit demand on data provided by the water purveyor.

Recycled Water Demand
Summarize recycled water demand in a table and identify recycled water use areas in the project using an illustration. Use the unit demand factor consistent with the water purveyor. Include land use, acreage, percent to be irrigated, irrigated acreage and gallons per day for all land use types within the project.

II.8.7 State and Federal Water Conservation Requirements

List the Federal and State mandated minimum water conservation standards.

II.8.8 Local Water Conservation Requirements

Description of local water conservation standards including requirements of the water purveyor and the City of Chula Vista Landscape Manual.

Description of indoor water conservation measures as required by the Water Conservation Plan Guidelines and additional indoor and outdoor water conservation measures to be used in the project. (See Attachments B & C)

Any additional water conservation measures to be offered by merchant builders as an option for homebuyers are to be included in this section.

II.8.9 Water Conservation Estimated Savings

Total estimated potable water savings (gallons per day) for the project due to implementation of the additional conservation measures.

II.8.10 Implementation Measures

List the water conservation measures to be implemented in the project and summarize the water conservation program including any efforts involving merchant builders, local water purveyors the City and any other public or private agencies.

II.8.11 Monitoring

Summarize the implementation timing for each water conservation measure including the responsibility for monitoring and reporting on the effectiveness of the measure if applicable.

References
Appendix

Adopted May 27, 2003

Residential Water Conservation Measures
Attachment B

All residential units subject to the Water Conservation Plan requirements shall contain the following three indoor water conservation measures:

Savings & Costs data are estimates based on the Water Use Efficiency, Strategies for Proposed Residential Developments, April 2002 report and are provided for information only.

1. Hot Water Pipe Insulation

Insulation of hot-water pipes, and separation of hot and cold water piping to avoid heat exchange.

Savings & Costs
Water savings - 2,400 gallons per residential unit per year. Estimated cost of insulating hot water pipes during construction - $50.00.

2. Pressure Reducing Valves

Pressure reducing valves maintain the pressure below 60 psi reducing the volume of any leakage present and preventing excessive flow of water from all appliances and fixtures.

Savings & Costs
Water savings - 1,800 gallons per unit per year. Estimated cost of pressure reducing valves - $100.00.

3. Water-Efficient Dishwashers

Dishwashers with water saving features such as water level sensors instead of timed fillers. The website <www.energystar.gov/products/dishwashers/> may be consulted for a current list of Energy Star label dishwashers.

Savings & Costs
Water savings – 650 gallons per unit per year. Estimated cost of water efficient dishwashers $300.00 to $700.00.

All residential units subject to the Water Conservation Plan requirements shall contain at least one outdoor water conservation measure and at least one additional water conservation measure from either the indoor or outdoor categories.

Outdoor Water Conservation Measures

1. Evapotranspiration (ET) Controllers

Timed, fixed irrigation scheduling based on estimates of actual plant evapotranspiration rates. Radio signal from a central control station or satellite transmits information to the controllers to operate the sprinklers for the appropriate length of time.

Savings & Costs
Water savings – 20,000 gallons per single-family unit per year. The cost is estimated to be $175.00 per installed controller and may require a signal and maintenance fee, estimated to be $48.00 per year.

Outdoor Water Conservation Measures (cont.)

2. Water-Efficient Landscaping

Use of drought tolerant plant materials, irrigation systems, and controllers as required by the Chula Vista Landscape Manual. In addition, the use of drip irrigation where possible and restriction of sprinkler irrigation as recommended by the water purveyors.

Savings & Costs

Water savings – Up to 50% of outdoor water use. For a 2,100 sq. ft. landscaped area a water savings of 12,000 gallons per year is estimated. The cost of water efficient landscaping is no different than conventional landscaping, possibly lower.

3. Xeriscape

Xeriscaping is a combination of seven principles, planning and design, practical turf areas, efficient irrigation, soil analysis and improvement, mulching, low water use plants and appropriate maintenance.

Savings & Costs

Water savings – 30% reduction in irrigation demand or about 16,000 gallons per year on a typical single-family lot. The cost of xeriscape does not exceed conventional landscape.

4. Soil Moisture Sensors

Soil moisture sensors placed at two or more depths and at several locations in the landscape to help determine when the soil is dry enough to require irrigation.

Savings & Costs

Alone, soil moisture sensors do not achieve water savings. However, in combination with other systems they are important tools for water savings. The cost of each sensor is approximately $235.00 and it is estimated that one or two soil moisture sensors are sufficient for a typical single-family lot (sunny and shady areas of landscape).

Indoor Water Conservation Measures

1. Dual Flush Toilets

Provides option to flush with partial (0.8 gallon) flow of water or with a full (1.6 gallon) flow depending on need.

Savings & Costs

It is estimated that a dual-flush toilet can save 4,000 gallons per year. Estimated cost of dual flush toilet - $200.00.

2. High-efficiency Washing Machines

Front loading and top loading Energy Star qualified clothes washers that use 35% to 50% less water than conventional washing machines. A current list of Energy Star high efficiency clothes washers can be found at <www.energystar.gov/products/clotheswashers/>.

Savings & Costs

Water savings – 7,000 gallons per year. Estimated cost of high-efficiency washing machine $800.00.

3. Point-of-Use, or Tank-less Water Heater

Installation of small water heaters close to the point of use, such as in bathrooms, kitchen and laundry area.

Savings & Costs

Water savings - 5,300 gallons per residential unit, per year. Estimated cost of point-of-use water heaters - $700.00. (The cost is approximately the same whether one large household unit is installed or three smaller ones at each point of use.)

Optional Water Conservation Measures

- Education Program including educational materials and guidance to new homeowners.
- Submeter all individual tenants in multi-family projects.
- Install waterless urinals in intensively used settings such as recreation areas and school sites.

Adopted May 27, 2003

Non-Residential
Water Conservation Measures
Attachment C

All Non-Residential uses subject to the Water Conservation Plan requirements shall contain the following two indoor water conservation measures:

1. **Hot Water Pipe Insulation**
   Install insulation on all hot water pipes in all common areas and all tenant-developed areas.

2. **Pressure Reducing Valves**
   Provide pressure reducing valves at all meters, set to deliver water at no higher than 60 psi.

All Non-Residential uses subject to the Water Conservation Plan requirements shall contain at least one outdoor water conservation measure and at least one additional water conservation measure from either the indoor or outdoor categories.

Outdoor Water Conservation Measures

1. **Water Efficient Irrigation System**
   Use of rain sensors, and soil moisture measuring devices for scheduling and controlling all landscape irrigation programs in commercial, industrial and business centers including tenant areas.

2. **Evapotranspiration (ET) Controllers**
   Timed, fixed irrigation scheduling based on estimates of actual plant evapotranspiration rates. Radio signal from a central control station or satellite transmits information to the controllers to operate the sprinklers for the appropriate length of time.

3. **Water-Efficient Landscaping**
   Use of native vegetation and drought tolerant plant materials, avoiding grass and turf to the extent practical and use of irrigation systems and controllers as required by the Chula Vista Landscape Manual Use. In addition, the use of drip irrigation where possible and restriction of sprinkler irrigation as recommended by the water purveyors.

4. **Recycled Water**
   Expand use of recycled water beyond areas mandated by the water purveyor to those areas where landscaping is within a reasonable reach of recycled water pipelines, to the extent that such use is acceptable to regulatory authorities.

5. **Outdoor Garden Sales**
   All tenants with outdoor garden sales areas to install micro-irrigation systems (trickle or drip irrigation) and provide water conservation educational materials for customers.

Indoor Water Conservation Measures

1. **Dual-Flush Toilets**
   Install dual-flush (ULFT) toilets in public restrooms including gas station restrooms.

2. **Waterless Urinals**
   Install waterless urinals in public restrooms (men's rooms) including gas station restrooms.

Indoor Water Conservation Measures (Cont.)

3. **Pre-Rinse Sprayer on Sinks**
   Install automatic shut-off sprayer for pre-rinsing dishes with a maximum flow rate of 1.6 gpm in all restaurant and fast-food units.

4. **High-Efficiency Dishwashers**
   Install high-efficiency dishwashers in restaurant buildings.

5. **Air-Cooled Ice Machines**
   Install air-cooled ice machines instead of water-cooled machines in restaurants.

6. **Conductivity Meters**
   Install conductivity meters on cooling towers to regulate cycling of cooling water and chemicals.

Optional Water Conservation Measures

- Submeter all individual tenants in buildings.
- Provide educational materials and guidance to tenants.

Adopted May 27, 2003

Public Facility Finance Plans (PFFP) Requirements

A Public Facility Finance Plan (PFFP) is a document that details infrastructure requirements for particular projects, and how the improvements will be funded. The *Chula Vista Municipal Code* (19.09.080) requires Public Facilities Finance Plans (PFFPs) for Sectional Planning Area (SPA) plans and Tentative Maps; they are also be required for development proposals of 50 dwelling units or more, and commercial or industrial projects with 50 equivalent dwelling units (EDUs) or greater.

I. Initiation and Preparation

Typically, PFFPs have been prepared early in the development review process, at the time a SPA plan is prepared; or, if no SPA is involved, as a part of the Tentative Map application. In some instances, the city may choose to incorporate the PFFP into other documents that meet the basic policy and technical requirements of a PFFP. For example, a PFFP could be incorporated into a Specific Plan or an area-specific financing plan sponsored by the city.

In some instances, the city will sponsor preparation of a PFFP; for example, when the geographic coverage involved encompasses a large area with multiple landowners and no single development project. The procedures for such city-sponsored PFFPs will be similar to developer-sponsored PFFPs.

Adoption of a PFFP does not establish any entitlement or right to any particular General Plan or zoning designation, or any particular development proposal.

A PFFP may be initiated by filing an application with the Director of Development Services. The applicant shall pay a deposit at the time any application for a PFFP is accepted, and the PFFP shall be prepared by the city, or a consultant selected by the city (which is typical), according to the procedures established. In some instances, developer cooperation in the preparation of PFFPs (e.g., infrastructure design and cost estimating) is acceptable. In the case of a city-prepared PFFP, the city may recover the cost of PFFP preparation by adding the cost to the impact fees (or other financing mechanisms) created to fund the required public facility improvements.

II. Content

PFFP content requirements are outlined below.

A. A PFFP shall include a complete description of the proposed development project and a complete description of all public facilities included within the boundaries of the plan, as defined by the Development Services Director. It shall also include a description of the individual and cumulative impacts of the proposed development on the community as it relates to the Growth Management Program, the specific facility master plans and the threshold standards.

B. The PFFP shall consist of maps, graphs, tables, and narrative text and shall be based upon the *General Plan* and zoning applicable within the area of impact. It shall be consistent with the Growth Management Program and threshold standards and shall implement the Growth Management Program within the area.

C. The boundaries of the PFFP shall be established by the city at the time a SPA plan or Tentative Map is submitted by the applicant. The boundaries shall be based upon the impact created by the project on existing and future need for facilities. The project boundaries will correlate the proposed development project with existing and future development proposed for the area of impact to provide for the economically efficient and timely installation of both on-site and off-site facilities and improvements required by the development. In establishing the boundaries for the PFFP, the city shall be guided by the following considerations:

1. Service areas or drainage or sewer basins that serve the project;

2. Extent to which facilities or improvements are in place or available;

3. Ownership of property;

4. Project impact on public facilities relationships, especially the impact on the city's planned major circulation network;

5. Special district service territories; and

6. Approved fire, drainage, sewer, or other facilities or improvement master plans.

D. The boundaries shall be established by resolution after a public hearing, notice of which is given pursuant to CVMC 19.12.070.

E. The PFFP shall show how and when the facilities and services necessary to accommodate development within the area will be installed or financed:

1. Police;

2. Fire/Emergency Medical Services;

3. Schools;

4. Libraries;

5. Parks and Recreation;

6. Water;

7. Sewer;

8. Drainage; and

9. Traffic;

F. The PFFP shall include the following information with regard to each facility and service listed in Section E, above:

1. List of Facilities and Services. A list or schedule of facilities and service requirements correlated to individual development projects within the area.

2. Inventory. An inventory of present and future requirements for each facility and service based upon the threshold standards. The inventory shall include life cycle cost (LCC) projections for each element in Section E, above, as they pertain to city fiscal responsibility. The LCC projections shall be for estimated life cycle for each element analyzed. The model used shall be able to identify and estimate initial and recurring life cycle costs for the above elements. Because requirements for certain facilities and services may overlap plan boundaries, the plan shall address the need for coordination and shall propose a coordination plan for facilities and services extending from one project boundary area to another. Cost estimates for funding public facilities and services directly related to the impact created by the project as well as for proposals for funding existing deficiencies required by the project prior to the phasing schedule set forth in the Growth Management Program shall be included. It must be shown that development in the area will not reduce the existing facilities or services capabilities within the project boundaries or create facilities or improvements shortages in other areas or reduce capability in any area below the threshold standards, which are established pursuant to CVMC 19.09.040-050. The growth inducing impact of the out-of-area improvements shall be assessed and mitigation provided, if appropriate, to the satisfaction of the city council.

3. Phasing Schedule. A phasing schedule that complies with the adopted development phasing policy as set forth in the Growth Management Program and the threshold standards, which establishes the timing for installation or provision for facilities and services required by the project. The phasing schedule shall ensure that development of one area will not utilize more than the area's pro rata share of facility or service capacity within the projected service area of a facility unless sufficient capacity is ensured for other areas at the time of development. The phasing schedule shall include a schedule of development within the area and a cash flow analysis for financing of facilities and services for the PFFP area. The phasing schedule shall identify periods where the demand for facilities and improvements may exceed the capacity and provide a plan for eliminating the shortfall. If a project cannot demonstrate consistency with the phasing schedule, the PFFP must demonstrate, to the city's satisfaction, how facilities required for the project in advance of the phasing schedule as set forth in the master plan will be provided. If no facility master plan or threshold standard exists for a particular facility, the PFFP for the project must demonstrate how that facility will be provided and financed in a phased and timely manner.

4. Financing Plan. A financing plan establishing specific methods of funding each facility and service identified in the PFFP, which allocates the cost to the various properties within the plan area. The plan shall identify those facilities and services that would otherwise be provided as a requirement of processing a development project (i.e., requirements imposed as a condition of a development permit) or provided by the developer in order to establish consistency with the *General Plan*, Growth Management Program or facility master plans, and those facilities and improvements for which new funding methods shall be sufficient to ensure that funds are available to construct or provide facilities or services when required by the phasing schedule for the project. Where facilities or services are required for property within the PFFP area, other than the project, the phasing plan shall identify those

other properties and the PFFP for each property shall be coordinated. Coordination, however, shall not require identical funding methods.

G. The PFFP shall establish the proportionate share of the cost of facilities and services identified in the Growth Management Program and the facility master plans attributable to the development of each property in the PFFP area.

H. In the event that an applicant provides private financing for public facilities or services to service a project in advance of the normal time frame for constructing such facilities, the approval of credits against any city fees for such advanced private financing may be postponed until the estimated time of such construction as specified in the specific facility master plan or the city's capital improvement program budget. In lieu of a facility master plan phasing schedule, such determination shall be made by the city council after reviewing information from the Development Services Director, City Engineer, Finance Director, and Deputy City Manager. In no event shall a developer receive interest on funds for providing public facilities or services in advance of the city's schedule. The developer shall also become responsible for the maintenance and operation costs associated with the early construction of said facility. No repayment will be made to the developer for the funds provided for maintenance and operational costs. All repayments will be considered in accordance with the city's projected construction dates for said facilities.

I. Assessment districts requested by the developer shall not be given credit for facility fees when a facility is constructed above the standards established by the respective facility master plan or standards imposed as conditions on the approval of the project by the city council.

J. A fiscal analysis/economic impact report shall be provided identifying capital budget impacts on the city as well as maintenance and operation costs for each proposed phase of development. The report shall include an analysis of the project impact on school districts and water agencies as well as the life cycle analysis set forth in Section F.2, above. Each year during the development of the project, the Development Services Director may require the applicant to provide the city with an updated fiscal impact report reflecting the actual revenue and expenditure impacts based upon the development of the project. The project shall be conditioned to provide funding for periods where expenditures exceed projected revenues.

K. Developer contributions shall not be required as a source of funding for that proportion of the cost of any facility or service that is needed to reach threshold standards due to the demands created by existing development. (Ord. 2790, 1999; Ord. 2448 § 2, 1991).

III. Public Facilities Finance Plan Amendment

The City Council may initiate an amendment to any PFFP at any time if, in its discretion, it determines that an amendment is necessary to provide adequate facilities and improvements, and subsequent permits will be conditioned on conformance. An applicant can also initiate an amendment to a PFFP that was originally adopted for their project, following the same procedures as those for establishing a new PFFP.