CHAPTER 11
GLOSSARY

Annual Budget of Public/ Nonprofit Agencies	The annual budget of public/nonprofit agencies is the total annual operating budget of all the public/nonprofit agency functions located in a building, excluding "pass-through" monies (e.g., Social Security payments) which the agency receives and redistributes. The annual budget is used to value the loss of public/nonprofit services due to flood damages.
Avoided Damages and Losses	Avoided damages and losses are the "benefits" counted in benefit-cost analysis. Six types of avoided damages and losses are counted in this benefit-cost program: building damages, contents damages, displacement costs, business income losses, rental income losses, and lost public/nonprofit services.
Base Year of Costs	The base year of costs is the year in which the mitigation project's costs were estimated and allows cost estimates made in prior years to be adjusted for any inflation in costs between the base year and the present time.
Benefit-Cost Ratio	The benefit-cost ratio is the ratio of the present value of benefits to project costs for the proposed mitigation project.
Benefits	The benefits counted in a benefit-cost analysis are the present value of the sum of the expected annual avoided damages over the lifetime of the mitigation project.
Block Colors	See **Cell Colors**.
Building Damages	Building damages are the estimated damages to a structure, expressed as a percentage of the building's replacement value. Building damages include both structural and non-structural elements (mechanical, electrical, and plumbing systems) but exclude the building's contents.

Building Depth-Damage Function (DDF)	The building depth-damage function (DDF) indicates the building's vulnerability to flood damage by showing the estimated building damage for the range of flood depths from -2 to 18 feet from the top of the lowest finished floor. See **Zero Flood Depth Elevation**.
Building Replacement Value	Building replacement value is the cost to provide a functionally-equivalent structure of the same size, generally of a more modern construction type. Replacement value does not include recreating historical or archaic materials, finishes or features.
Building Reproduction Value	Building reproduction value is the cost of duplicating the design and architectural details of a specific, usually historic, building.
Building Type	Building types considered in the program are the six Federal Insurance Administration (FIA) building types (1 story without basement, 2 story without basement, and split level without basement; 1 or 2 story with basement, split level with basement; and mobile home) plus an "other" category. The "other" category allows data inputs for building types not covered by the six FIA building types.
Building-Specific Data	Building-specific data are values which apply to the specific building under evaluation rather than to a generic building construction type.
Business Income Losses	Business income losses are the value of lost net business income due to flood damage.
Buyout	Buyout is a type of mitigation measure in which the owner's interest in the building is purchased and the building demolished. Buyouts are assumed to be 100% effective mitigation measures at all flood depths.
Cell Color Codes	Each cell (block) of data entry or data display areas of the program screens is color coded to inform the user what type of information each block contains. See **Style List**. Seven cell colors indicate different types of entries: **GREEN Blocks (Data Input)** require the user to enter data concerning the building or project and directly affect the calculated results. **PINK Blocks (Information Only)** contain information about the building or project and do not affect the calculated results.

	PURPLE Blocks (Carry Over) contain information that was entered by the user in other screens. **ORANGE Blocks (Default)** contain default data which varies depending on the building type selected and other user-determined inputs. **BLUE Blocks (Override Default)** can be used to override default data with project-specific data. **YELLOW Blocks (Results)** contain calculated results from the model. **RED Block (OMB Policy)** contains the discount rate that is defined by OMB or FEMA policy and thus is not a user-defined entry.
Coastal Transect	Used in the Coastal-A Zone and Coastal-V Zone programs (but not in the Riverine Flood program), a coastal transect is a line drawn perpendicular to the coastline showing the A-Zone and V-Zone regions. Coastal transects are shown on maps in coastal Flood Insurance Studies.
Construction Date	The construction date is the year during which the building's construction was started.
Contents Damages	Contents damages are the estimated damages to the building's contents, expressed as a percentage of the total contents' replacement value. Contents damages include furniture, office equipment, carpet, and other items specific to individual tenants' usages, but exclude mechanical, electrical, and plumbing systems which are non-structural parts of the building.
Contents Depth-Damage Function	The contents depth-damage function (DDF) indicates the content's vulnerability to flood damage by showing the estimated contents damage for the range of flood depths from -2 to 18 feet from the top of the lowest finished floor. See **Zero Flood Depth Elevation**.
Contents Value	The contents value is the estimated total value of the building's contents, including furniture, carpet, equipment, supplies, etc.

Continuity Premium	The post-disaster continuity premium is a means of more highly valuing public/nonprofit services which are particularly important in the post-disaster environment. The continuity premium is the extra dollar amount per day an agency would be willing to pay to maintain its functions after a flood. This premium is appropriate for those public/nonprofit services which may be more valuable than normal in the post-flood time period.
Cost of Occupant Displacement	The cost of occupant displacement is the total cost of displacement after a flood, including rent for temporary quarters, moving, and extra operating costs incurred because of displacement. The total cost of displacement of occupants is calculated from the displacement time and cost per month.
Default Building Depth-Damage Function	The default building depth-damage function indicates a typical building's vulnerability to flood damage by showing the estimated levels of damage at each flood depth, based on the building type selected.
Default Values	Default, or reference, values are the estimated "typical" values contained in the program which are used in a **LEVEL ONE (Minimum Data)** analysis to facilitate a benefit-cost analysis for a "typical" building of the type selected.
Demolition Threshold Damage Percentage	The demolition threshold damage percentage is the level of building damage, expressed as a percentage of the building's replacement value, at which the building is likely to be demolished rather than repaired. This percentage will vary depending on the type, style, age, condition, and historic significance of the structure.
Depth-Damage Function (DDF)	See **Building Depth-Damage Function** or **Contents Depth-Damage Function**.
Discharge	Discharge is the volume of water that will flow in a river or stream during a given time. Discharge is usually measured in cubic feet per second.
Discount Rate	The discount rate is an interest rate which accounts for the time value of money. The discount rate is used to convert expected annual benefits over the lifetime of a project to a net present value. For Federally-funded hazard mitigation projects, the discount rate is determined by U.S. Office of Management and Budget (OMB) guidance.

Displacement Costs	Displacement costs are the product of displacement costs per month and the expected period for which the building will be unusable due to flood damage. Displacement costs are incurred when owners are displaced to a temporary site while flood-related damage to the original building is repaired and include costs for rent and other displacement expenses.
Displacement Time	Displacement time is the time during which occupants must operate from a temporary location due to flood-related damage while repairs are made to the original building. Compare with **Functional Downtime**.
Economic Parameters	Economic parameters used in the benefit-cost program are the **Discount Rate**, **Project Useful Life**, and **Present Value Coefficient**.
Elevation	Elevation is a type of mitigation measure in which an existing building is elevated to reduce future flood damages.
Estimated	"Estimated" is used to denote data inputs which are based on judgement rather than exact values, and also to denote calculated results derived from other input parameters. In benefit-cost analysis "estimated" is distinct from "expected." See **Expected**.
Exceedance Probability	The exceedance probability is the likelihood (probability) of exceeding a particular value in a stated time period. For example, the annual exceedance probability for a 3-foot flood is the probability for all floods greater than or equal to a 3-foot flood.
Expected	"Expected" in benefit-cost analysis means a statistical, average value. For example, "expected" annual damages are the statistical average damages "expected" over a long time period. "Expected" annual damages do not occur every year.
Expected Annual Avoided Damages	The expected annual avoided damages are the expected annual benefits counted in benefit-cost analysis. In other words, the expected annual avoided damages are the difference between expected annual damages before and after mitigation.

Expected Annual Damages After Mitigation	Expected annual damages after mitigation are the average damages per year expected over a long time period. For each flood depth, expected annual damages after mitigation are calculated by multiplying the scenario damages after mitigation by the expected annual number of floods of each depth. See **Expected Annual Number of Floods.** In this program, expected annual damages are calculated for six categories of damages and losses: building damages, contents damages, displacement costs, business income losses, rental income losses, and lost public/nonprofit services.
Expected Annual Damages Before Mitigation	Expected annual damages before mitigation are the average damages per year expected over a long time period. For each flood depth, expected annual damages are calculated by multiplying the scenario damages before mitigation by the expected annual number of floods of each depth. See **Expected Annual Number of Floods.** In this program, expected annual damages are calculated for six categories of damages and losses: building damages, contents damages, displacement costs, business income losses, rental income losses, and lost public/nonprofit services.
Expected Annual Number of Floods	The expected annual number of floods is the long term average annual number of floods of a particular depth, from -2 to 18 feet. The expected annual number of floods is closely similar to the annual probability of floods at each depth.
Expected Net Present Value	The expected net present value of a flood hazard mitigation project is the present value of benefits arising from the mitigation project. Expected annual benefits in each year of the useful lifetime of the project are discounted to present value and summed to obtain the net present value of benefits.
Flood Barrier, Mitigation Measure	A flood barrier is a type of mitigation measure in which barriers such as flood walls, levees, or enclosures are constructed to prevent flood water from reaching a structure.
Flood Depth-Damage Table	The flood depth-damage table displays the estimated damage by flood depth for the six classes of building types plus the "other" classification included in the program.

Flood Risk

The flood risk for a particular building is the expected annual number of floods, in one-foot increments from -2 to 18 feet in the program, at the building site. Flood risk varies markedly with elevation. See **Zero Flood Depth Elevation**.

Freeboard

Freeboard is the additional height of a flood protection measure above an expected flood height which will provide an extra measure of flood protection. For example, to provide 100-year flood protection, levees normally are constructed with 3 feet above the 100-year flood elevation (i.e., with 3 feet of freeboard).

Functional Downtime

Functional downtime is the time during which an agency/organization is unable to provide its services due to flood damage. Compare with **Displacement Time**.

Income, Estimated Net

The estimated net income of commercial businesses is the net monthly income of commercial businesses in the building.

Level One (Minimum Data) B-C Analysis

A **LEVEL ONE (Minimum Data)** benefit-cost analysis uses "default" or reference data built into the program, and requires the minimum amount of building-specific and project-specific data. A **LEVEL ONE** analysis may be appropriate for small, low-cost projects or as an initial screening of larger projects. See **LEVEL TWO (Detailed)** benefit-cost analysis.

Level Two (Detailed) B-C Analysis

A **LEVEL TWO (Detailed)** benefit-cost analysis is a highly detailed analysis in which default, or reference, values may be overridden with project-specific data. A **LEVEL TWO** analysis may be desirable for large, high-cost projects, projects which are politically sensitive, or projects where initial screening indicates that benefit-cost ratios are close to one, whenever the default values used in the **LEVEL ONE (Minimum Data)** analysis do not accurately reflect a specific project under evaluation, or where the results of a **LEVEL ONE** analysis indicate that a more detailed analysis is required to determine whether the project is cost-effective.

Main Menu

The main menu is the list of headings which appears at the top of the display screen, customized for the benefit-cost program. The main menu headings in the **Benefit-Cost Program** are shown below:

Menu Bar	The menu bar displays all the main menu headings of the benefit-cost program in the row near the top of the screen (i.e., word commands), under the words "Quattro Pro for Windows."
Menu Tree	The menu tree is the complete list of items which can be accessed by the menu bar.
Mitigation Measure	A flood hazard mitigation measure is any project undertaken to mitigate the flood hazard. See **Elevation, Flood Barrier, Relocation**, and **Buyout**.
Mitigation Project Cost	The mitigation project cost is the sum of all direct construction costs plus other costs such as architectural and engineering fees, testing, permits, and project management but excludes relocation costs. See **Relocation Costs**.
Modified Building Depth-Damage Function	The modified building depth-damage function is the building DDF modified to account for the demolition threshold damage percentage.
Net Present Value (NPV)	See **Expected Net Present Value**.
Other, Mitigation Measure	The "Other" category of flood hazard mitigation projects includes wet floodproofing (see previous discussion on this subject) and any other measures not covered by the **Elevation, Buyout, Relocation**, or **Flood Barrier** categories.
Planning Horizon	The planning horizon is the expected useful lifetime of the flood hazard mitigation project. See **Project Useful Life**.
Post-Disaster Continuity Premium	See **Continuity Premium**.
Present Value	See **Expected Net Present Value**.

Present Value Coefficient

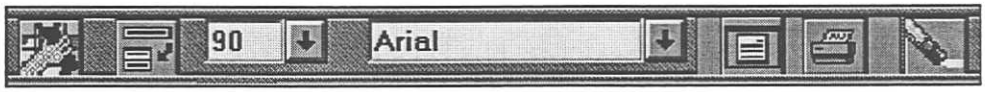
The present value coefficient is a multiplier determined by the discount rate and the planning period which indicates the present value of $1.00 per year in benefits over the useful lifetime of the project. See **Expected Net Present Value**.

Present Value Criterion

The present value criterion is the difference between **Project Benefits** and **Project Costs**. This value shows the magnitude of the difference between **Benefits** and **Costs**, and may be greater than zero (if benefits exceed costs) or less than zero (if costs exceed benefits).

Productivity Tools SpeedBar

The productivity tools SpeedBar is an additional row of symbols, usually underneath the first SpeedBar, which provides access to more Quattro Pro features.



Project Costs

Project costs are the total mitigation project costs. See **Mitigation Project Cost**.

Project Useful Life

The project's useful life is the estimated time period over which the mitigation project will maintain its effectiveness. Project useful life **must** be commensurate with the actual project being considered.

Protected Blocks

Protected blocks cannot be changed by the user. All uncolored (white) blocks and blocks colored orange, yellow, and purple are protected. See **Unprotected Blocks**.

Public/ Nonprofit Services Lost

Public/nonprofit services lost are those services which cannot be provided when a building becomes unusable during a flood. Avoided public/nonprofit services lost are one of the benefits counted in the benefit-cost program.

Recurrence Intervals

A recurrence interval is the average time period between similar events (e.g., 100 years). A 100-year flood means a flood with a 1% annual probability of occurring.

Relocation Costs

Relocation costs are incurred when occupants must be relocated for construction of the mitigation project. In such cases, the relocation costs are an integral part of the mitigation project and must be counted in the total mitigation project costs.

Relocation, Mitigation Measure

Relocation is a flood hazard mitigation alternative available in some situations. Relocation entails moving a structure out of the flood plain.

Rent, Total Monthly

Total monthly rent is the amount of rent paid by all tenants in the structure. For a public/nonprofit building, the rent value entered should be only the rent for that portion, if any, rented to private tenants.

Rental Income Losses

Rental income losses are lost payments normally paid by private tenants for all or a portion of the building. Inter- or intra-agency rents within the Federal Government are **not** counted because such payments are generally transfers and their loss does not represent a true economic loss.

Scenario Damages

Scenario damages are the damages per flood occurrence (i.e., event) of a given flood depth. In the program, scenario damages are expressed in 1-foot flood-depth increments from -2 to 18 feet.

Scenario Damages After Mitigation

Scenario damages after mitigation are the estimated damages and losses from a single flood of a particular depth at the building after completion of the mitigation project. Scenario damages do **NOT** depend on the probability of floods at a location.

Scenario Damages Before Mitigation

Scenario damages are the damages and losses from a single flood of a particular depth at the building under evaluation before completion of the mitigation project. Scenario damages do **NOT** depend on the probability of floods at that location.

Scenario Run Identification

The scenario run identification is a number or name which will distinguish this particular analysis from others with different inputs or assumptions.

SpeedBar

The SpeedBar is the row of icons (small pictures) just under the menu bar, i.e., the first row of buttons and tools. As the cursor moves across each item in the SpeedBar, an explanation of the button (or symbol) appears in the bottom left corner of the screen.

Stories Above Grade

Stories above grade are the number of stories above ground level in this building.

Style List

The style list is the set of names which appear in the Style List window (located on the SpeedBar) which indicates the type of information contained in each cell (block). The seven categories are the same as for the **Cell Color Codes**.

Total Building Replacement Value

The total building replacement value is the product of the building replacement value per square foot and the building size.

Total Mitigation Project Costs

Total mitigation project costs are the sum of the project costs and relocation costs necessary for the project.

Unprotected Blocks

Unprotected blocks can be changed by the user. All blocks colored green, blue, and red are unprotected. See **Protected Blocks**.

Zero Flood Depth Elevation

The zero flood depth elevation of the building is the elevation of the top of the finished flooring of the lowest finished floor, as defined by the Federal Insurance Administration in compiling flood damage data.

Zoom List Box

The zoom list box is the rectangular box in the third row at the top of the QPW window, which may be adjusted for the size of an individual computer screen display.