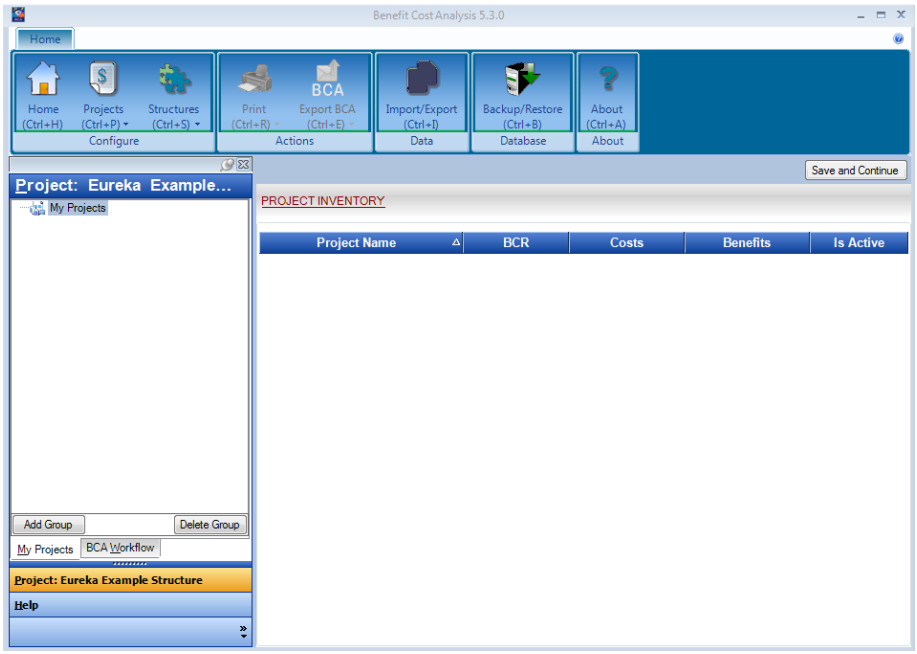
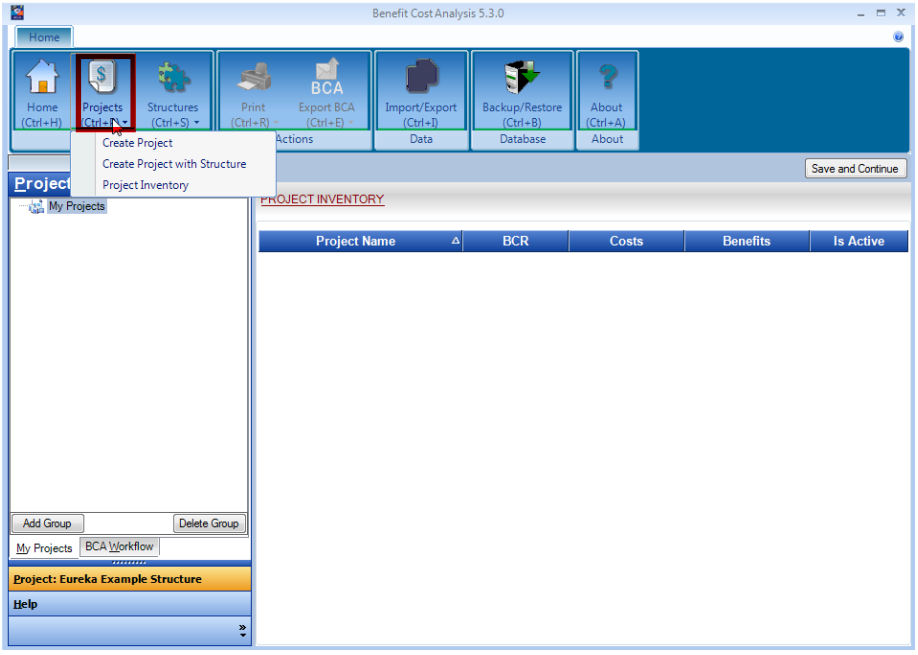
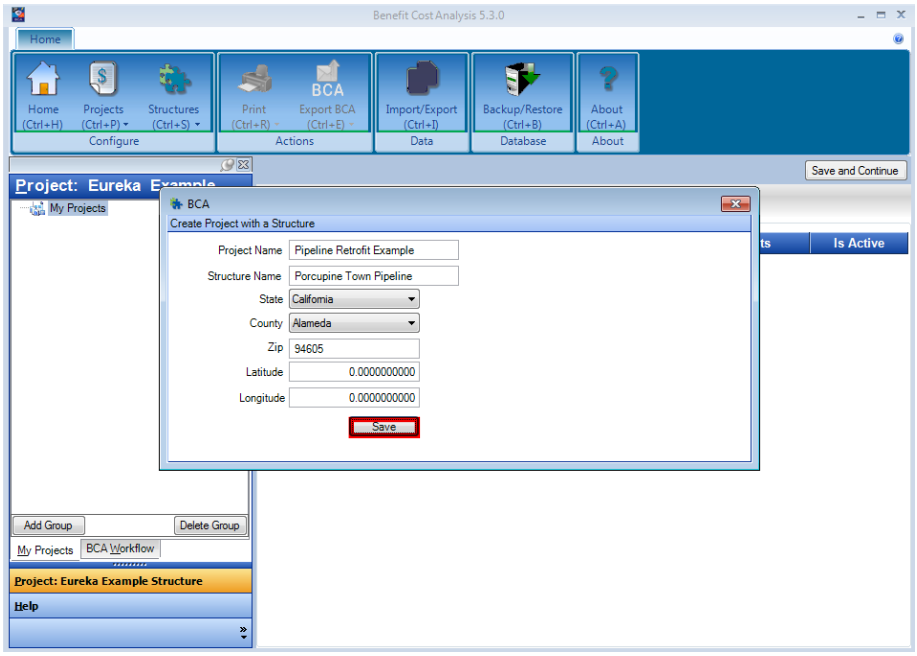
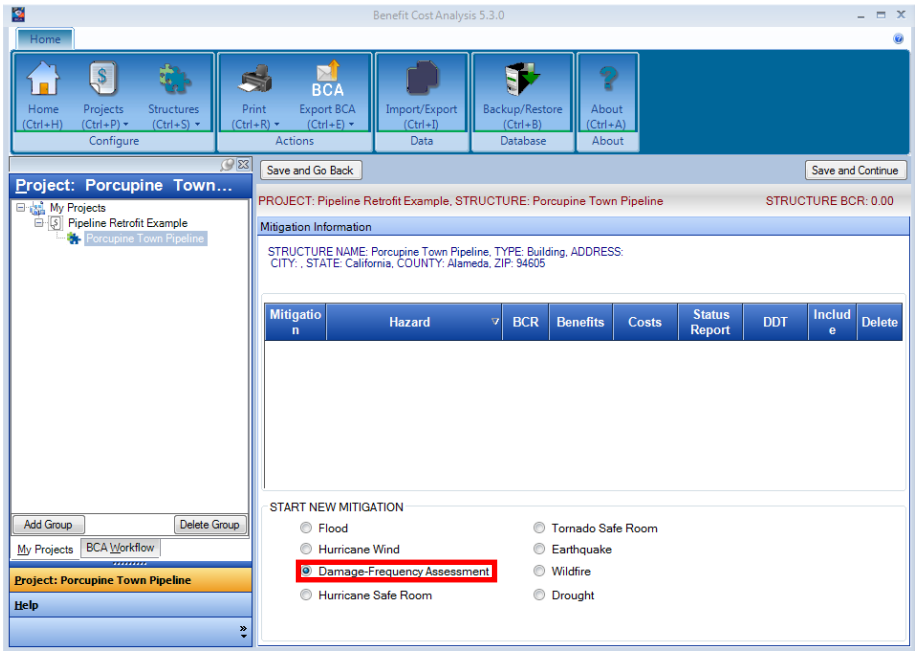
Starting a BCA in the FEMA BCA Tool

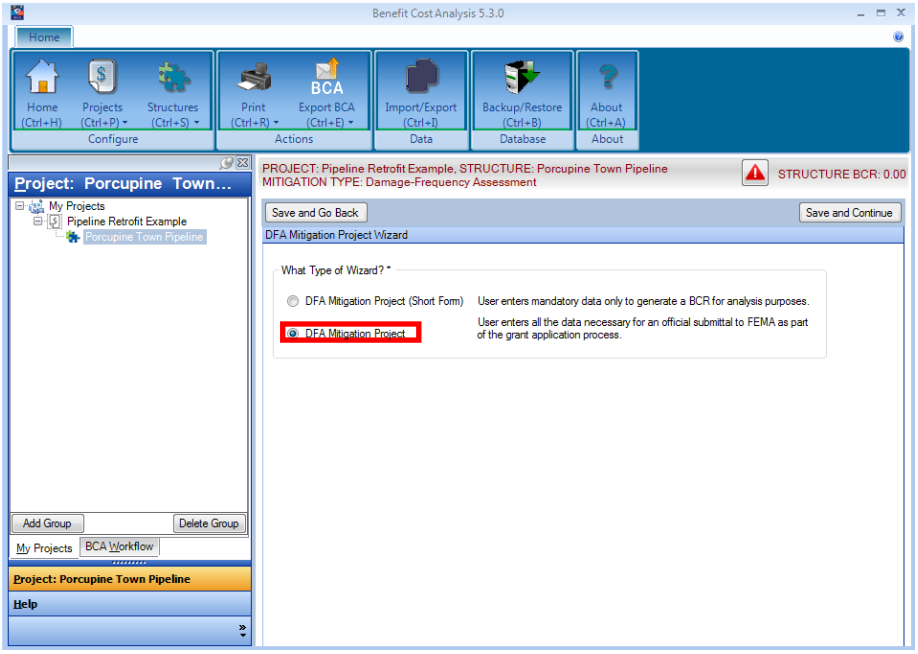


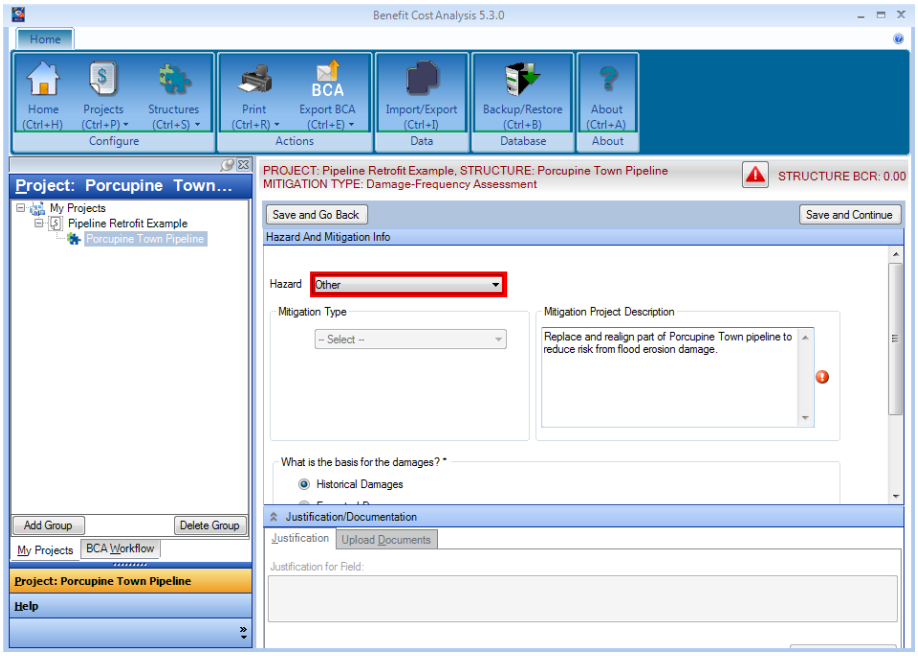


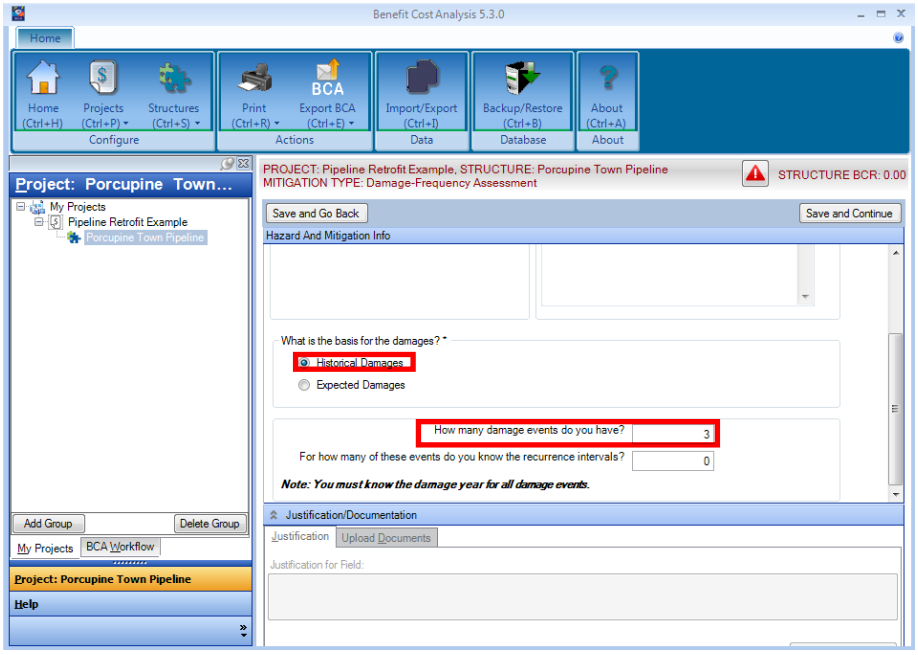

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Save and Continue
Project: Eureka Example
My Projects
BCA
Create Project with a Structure
Project Name
Pipeline Retrofit Example
Structure Name
Porcupine Town Pipeline
State
California
County
Alameda
Zip
94605
Latitude
0.0000000000
Longitude
0.0000000000
Save
Is Active
Add Group
Delete Group
My Projects
BCA Workflow
Project: Eureka Example Structure
Help

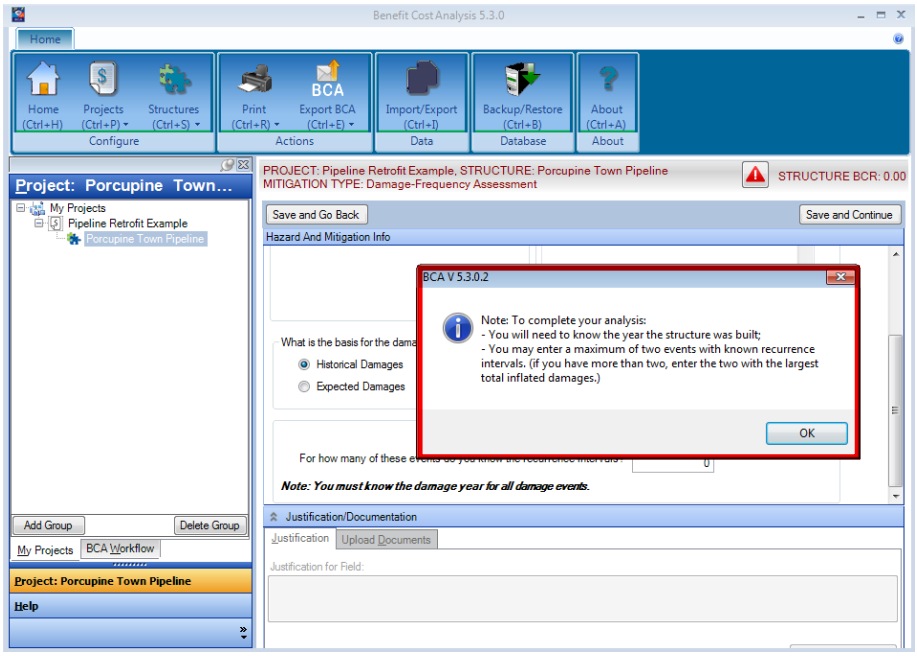
Damage Frequency Assessment Example

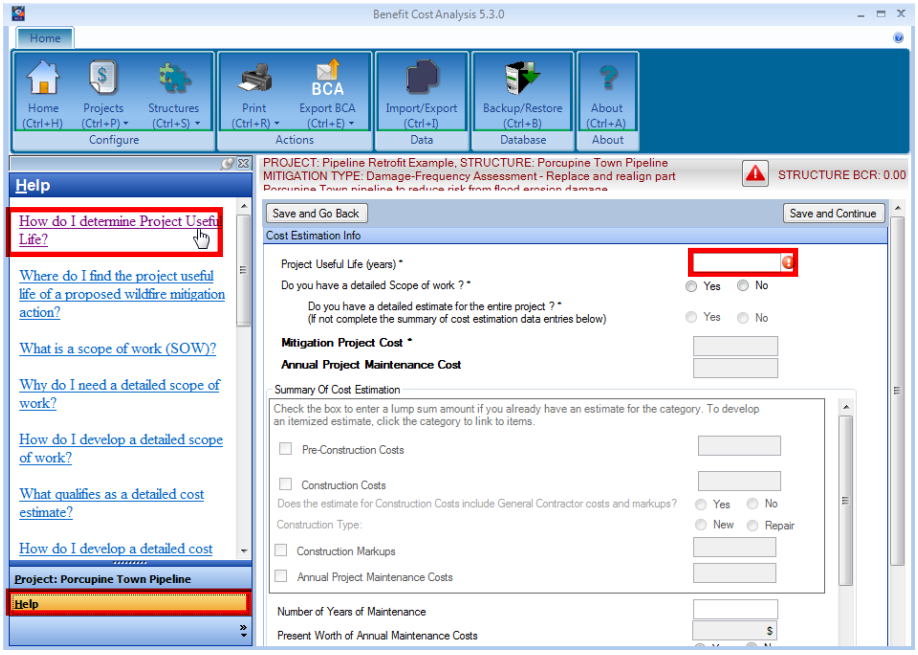


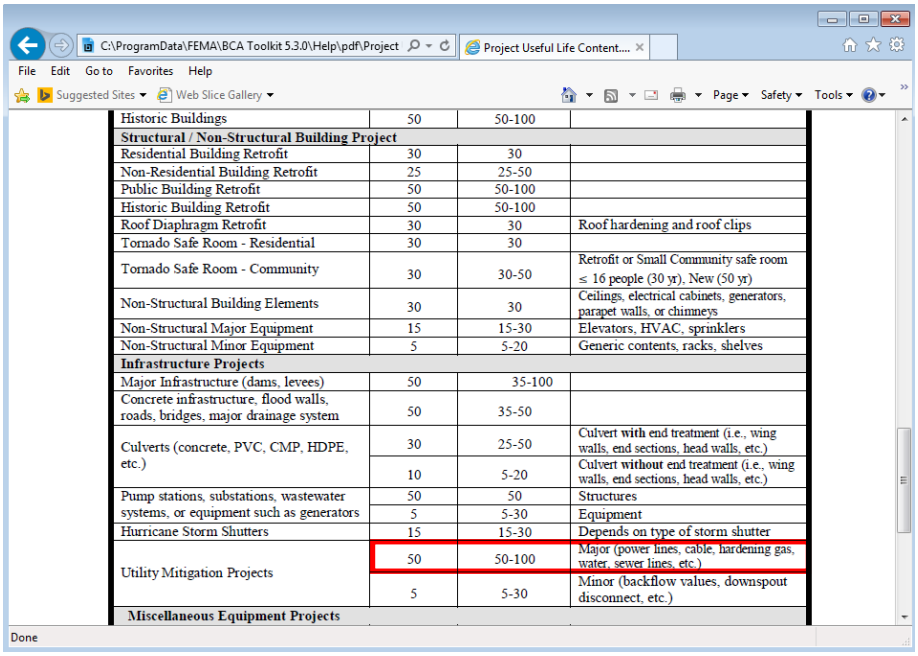



Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Town...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Hazard And Mitigation Info
Hazard
Other
Mitigation Type
-- Select --
Mitigation Project Description
Replace and realign part of Porcupine Town pipeline to reduce risk from flood erosion damage.
What is the basis for the damages? *
Historical Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field:

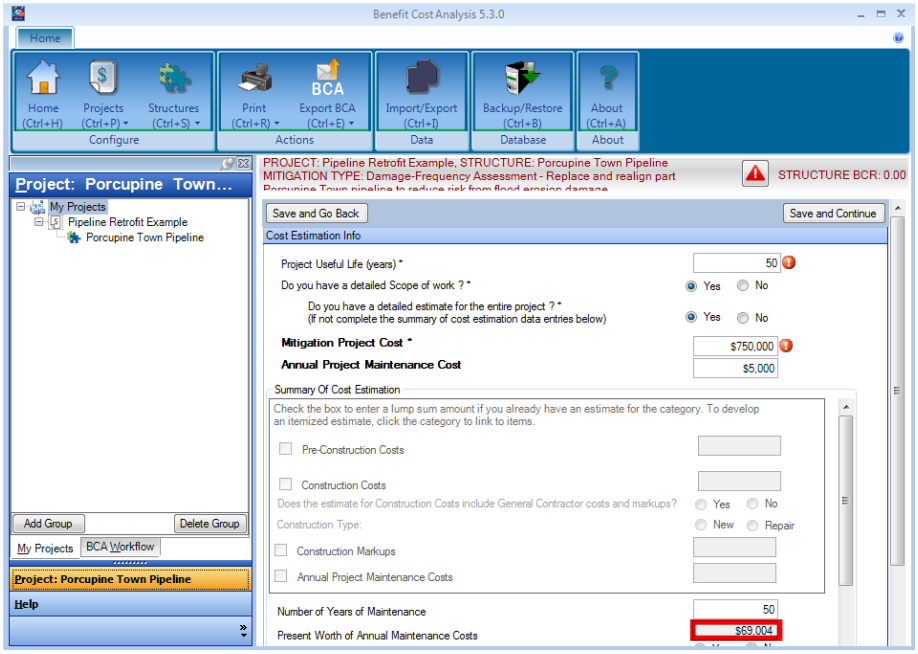

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Town...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Hazard And Mitigation Info
What is the basis for the damages? *
Historical Damages
Expected Damages
How many damage events do you have?
3
For how many of these events do you know the recurrence intervals?
0
Note: You must know the damage year for all damage events.
Justification/Documentation
Justification
Upload Documents
Justification for Field:

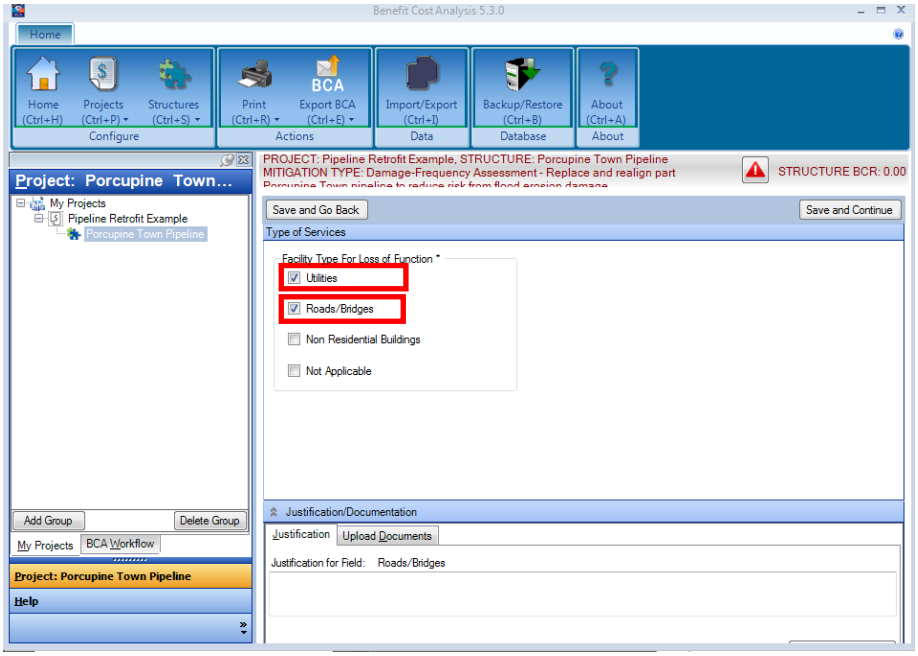

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Town...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Hazard And Mitigation Info
BCA V 5.3.0.2
Note: To complete your analysis:
- You will need to know the year the structure was built;
- You may enter a maximum of two events with known recurrence intervals. (if you have more than two, enter the two with the largest total inflated damages.)
OK
What is the basis for the dama
Historical Damages
Expected Damages
For how many of these
Note: You must know the damage year for all damage events.
Justification/Documentation
Justification
Upload Documents
Justification for Field:

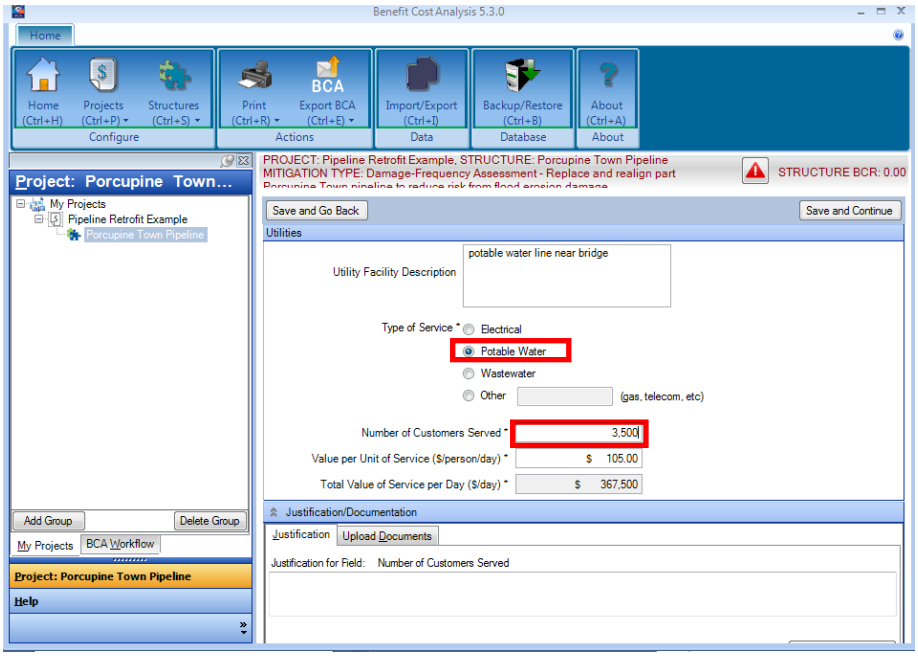

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Help
How do I determine Project Useful Life?
Where do I find the project useful life of a proposed wildfire mitigation action?
What is a scope of work (SOW)?
Why do I need a detailed scope of work?
How do I develop a detailed scope of work?
What qualifies as a detailed cost estimate?
How do I develop a detailed cost
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Cost Estimation Info
Project Useful Life (years) *
Do you have a detailed Scope of work ? *
Yes
No
Do you have a detailed estimate for the entire project ? *
(If not complete the summary of cost estimation data entries below)
Mitigation Project Cost *
Annual Project Maintenance Cost
Summary Of Cost Estimation
Check the box to enter a lump sum amount if you already have an estimate for the category. To develop an itemized estimate, click the category to link to items.
Pre-Construction Costs
Construction Costs
Does the estimate for Construction Costs include General Contractor costs and markups?
Construction Type:
New
Repair
Construction Markups
Annual Project Maintenance Costs
Number of Years of Maintenance
Present Worth of Annual Maintenance Costs
$

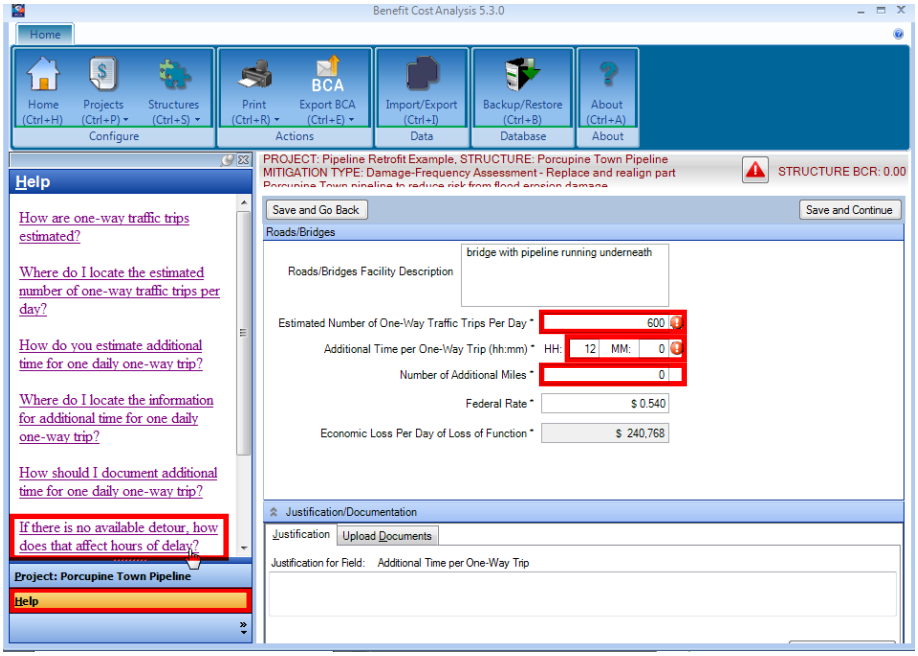


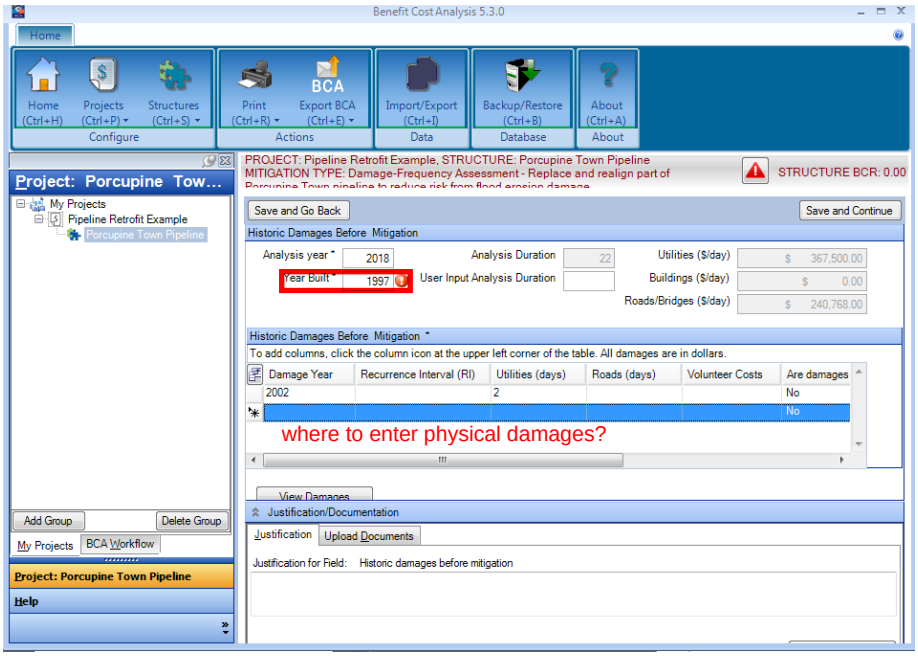
Historic Buildings	50	50-100	
Structural / Non-Structural Building Project			
Residential Building Retrofit	30	30	
Non-Residential Building Retrofit	25	25-50	
Public Building Retrofit	50	50-100	
Historic Building Retrofit	50	50-100	
Roof Diaphragm Retrofit	30	30	Roof hardening and roof clips
Tornado Safe Room - Residential	30	30	
Tornado Safe Room - Community	30	30-50	Retrofit or Small Community safe room ≤ 16 people (30 yr), New (50 yr)
Non-Structural Building Elements	30	30	Ceilings, electrical cabinets, generators, parapet walls, or chimneys
Non-Structural Major Equipment	15	15-30	Elevators, HVAC, sprinklers
Non-Structural Minor Equipment	5	5-20	Generic contents, racks, shelves
Infrastructure Projects			
Major Infrastructure (dams, levees)	50	35-100	
Concrete infrastructure, flood walls, roads, bridges, major drainage system	50	35-50	
Culverts (concrete, PVC, CMP, HDPE, etc.)	30	25-50	Culvert **with** end treatment (i.e., wing walls, end sections, head walls, etc.)
	10	5-20	Culvert **without** end treatment (i.e., wing walls, end sections, head walls, etc.)
Pump stations, substations, wastewater systems, or equipment such as generators	50	50	Structures
	5	5-30	Equipment
Hurricane Storm Shutters	15	15-30	Depends on type of storm shutter
Utility Mitigation Projects	50	50-100	Major (power lines, cable, hardening gas, water, sewer lines, etc.)
	5	5-30	Minor (backflow values, downspout disconnect, etc.)
Miscellaneous Equipment Projects			

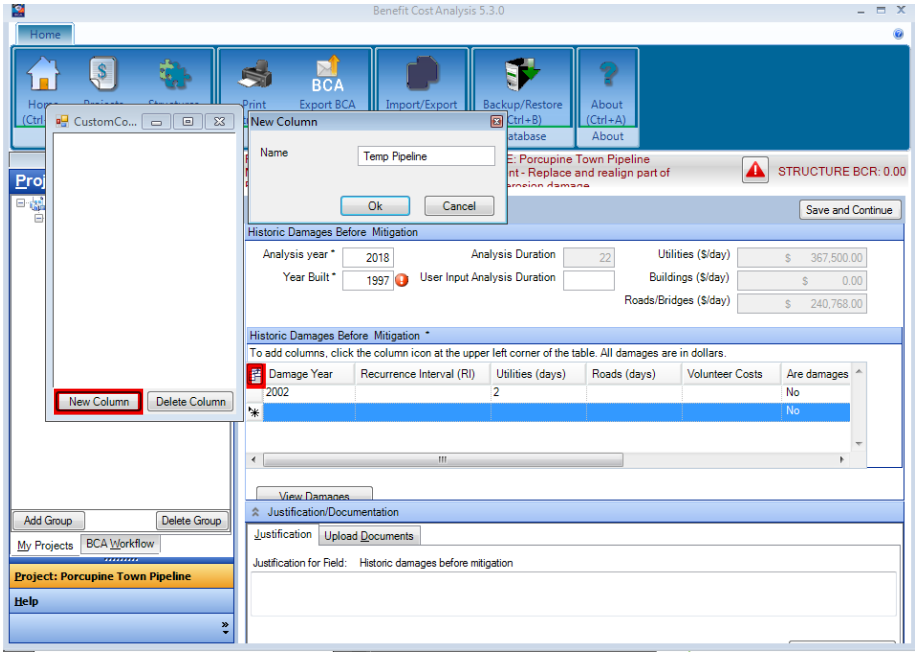


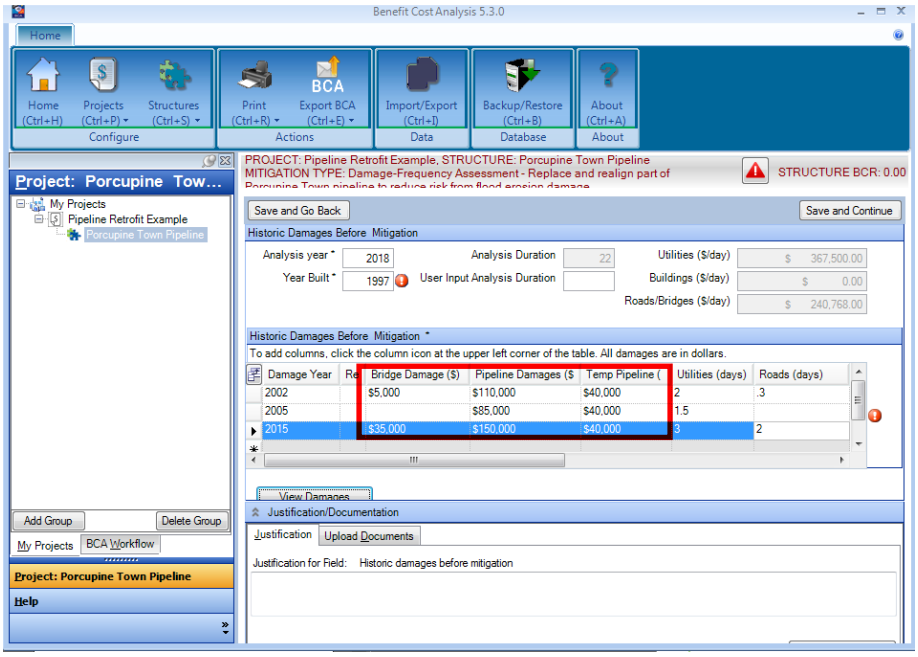

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
BCA
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Town...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Type of Services
Facility Type For Loss of Function *
Utilities
Roads/Bridges
Non Residential Buildings
Not Applicable
Justification/Documentation
Justification
Upload Documents
Justification for Field: Roads/Bridges
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

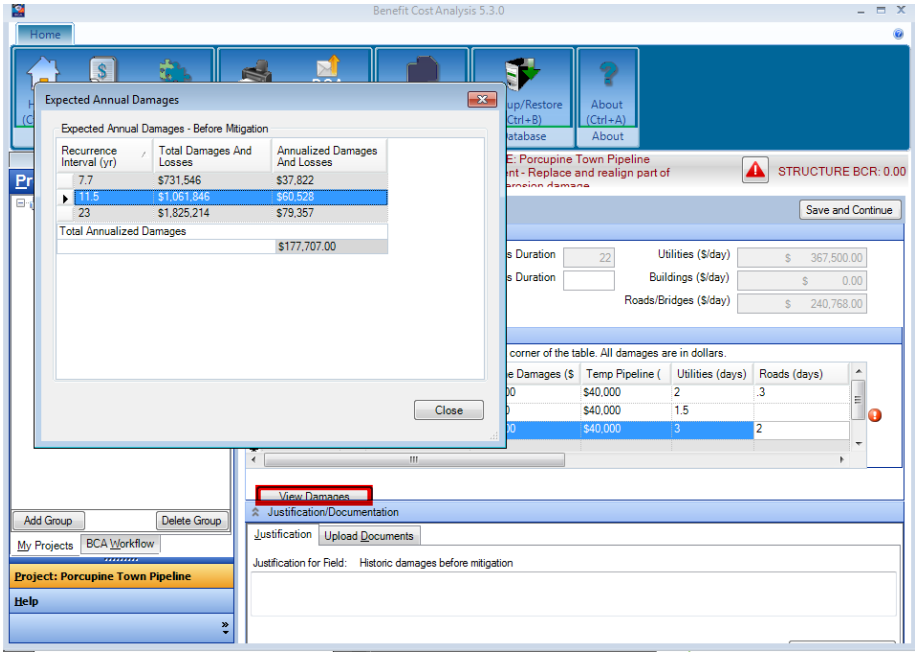

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
BCA
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Town...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Utilities
Utility Facility Description
potable water line near bridge
Type of Service *
Electrical
Potable Water
Wastewater
Other
(gas, telecom, etc)
Number of Customers Served *
3,500
Value per Unit of Service ($/person/day) *
$ 105.00
Total Value of Service per Day ($/day) *
$ 367,500
Justification/Documentation
Justification
Upload Documents
Justification for Field: Number of Customers Served
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

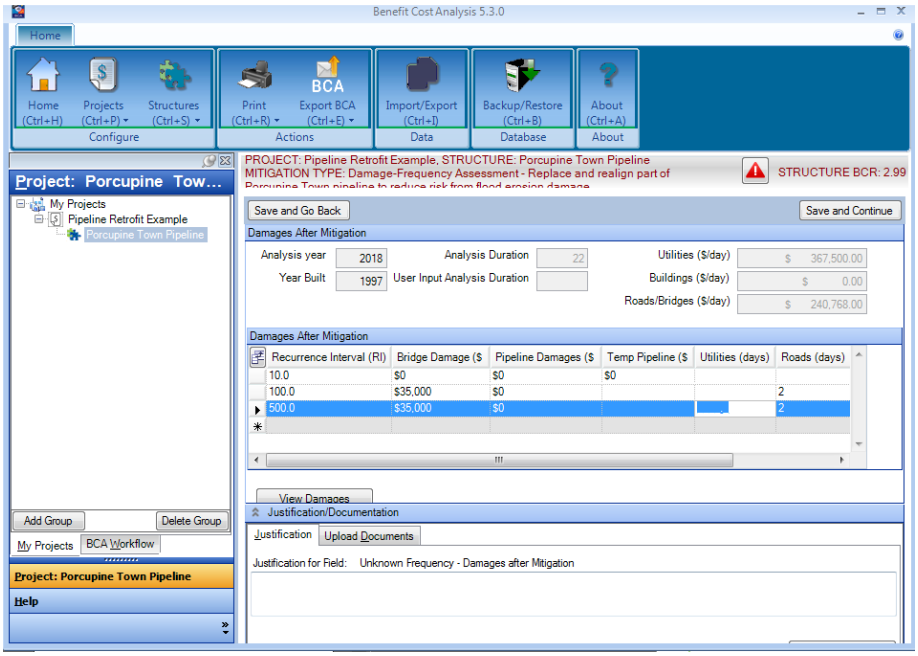

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Help
How are one-way traffic trips estimated?
Where do I locate the estimated number of one-way traffic trips per day?
How do you estimate additional time for one daily one-way trip?
Where do I locate the information for additional time for one daily one-way trip?
How should I document additional time for one daily one-way trip?
If there is no available detour, how does that affect hours of delay?
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Roads/Bridges
Roads/Bridges Facility Description
bridge with pipeline running underneath
Estimated Number of One-Way Traffic Trips Per Day *
600
Additional Time per One-Way Trip (hh:mm) *
HH: 12 MM: 0
Number of Additional Miles *
0
Federal Rate *
$ 0.540
Economic Loss Per Day of Loss of Function *
$ 240,768
Justification/Documentation
Justification
Upload Documents
Justification for Field: Additional Time per One-Way Trip

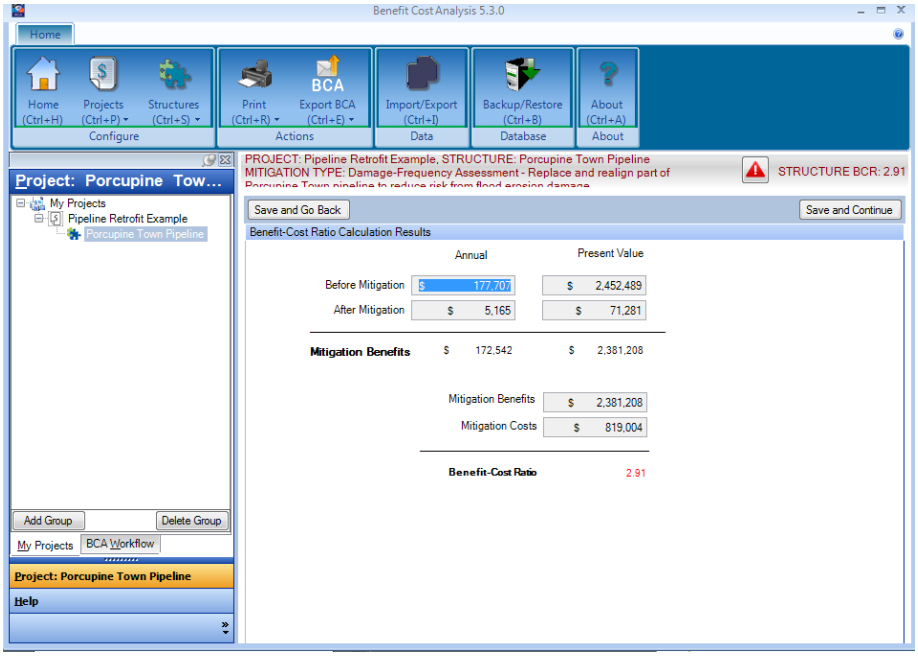

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Tow...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part of
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Historic Damages Before Mitigation
Analysis year *
2018
Year Built *
1997
Analysis Duration
22
User Input Analysis Duration
Utilities ($/day)
$ 367,500.00
Buildings ($/day)
$ 0.00
Roads/Bridges ($/day)
$ 240,768.00
Historic Damages Before Mitigation *
To add columns, click the column icon at the upper left corner of the table. All damages are in dollars.
Damage Year
Recurrence Interval (RI)
Utilities (days)
Roads (days)
Volunteer Costs
Are damages
2002
2
No
No
where to enter physical damages?
View Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field: Historic damages before mitigation


Benefit Cost Analysis 5.3.0
Home
BCA
Import/Export
Backup/Restore
About
CustomCo...
New Column
Name
Temp Pipeline
Ok
Cancel
STRUCTURE BCR: 0.00
Save and Continue
Historic Damages Before Mitigation
Analysis year *
2018
Year Built *
1997
Analysis Duration
22
User Input Analysis Duration
Utilities ($/day)
Buildings ($/day)
Roads/Bridges ($/day)
To add columns, click the column icon at the upper left corner of the table. All damages are in dollars.
Damage Year
Recurrence Interval (RI)
Utilities (days)
Roads (days)
Volunteer Costs
Are damages
2002
No
New Column
Delete Column
View Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field: Historic damages before mitigation
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

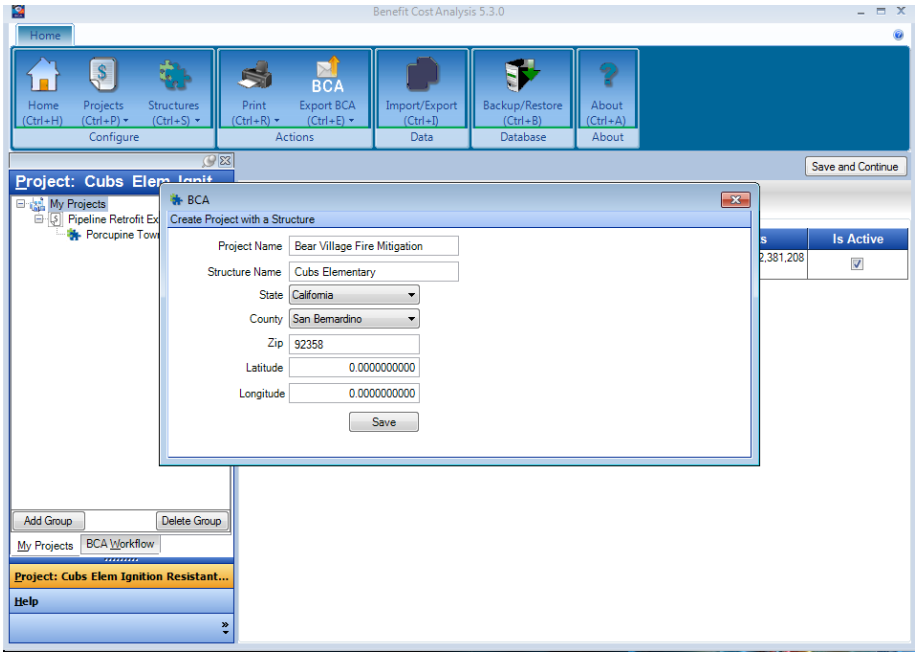

Benefit Cost Analysis 5.3.0
Home
Configure
Actions
Data
Database
About
Project: Porcupine Tow...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part of
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Historic Damages Before Mitigation
Analysis year *
2018
Year Built *
1997
Analysis Duration
22
User Input Analysis Duration
Utilities ($/day)
Buildings ($/day)
Roads/Bridges ($/day)
To add columns, click the column icon at the upper left corner of the table. All damages are in dollars.
Damage Year
Bridge Damage ($)
Pipeline Damages ($
Temp Pipeline (
Utilities (days)
Roads (days)
2002
$5,000
$110,000
$40,000
2
3
2005
$85,000
$40,000
1.5
2015
$35,000
$150,000
$40,000
3
2
View Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field: Historic damages before mitigation
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

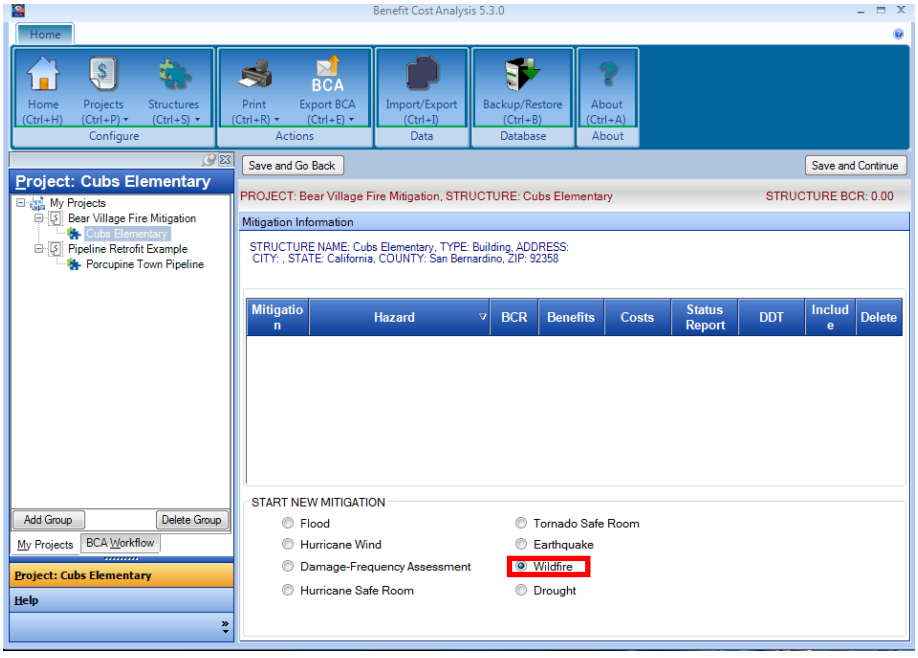

Benefit Cost Analysis 5.3.0
Home
Expected Annual Damages
Expected Annual Damages - Before Mitigation
Recurrence Interval (yr)
Total Damages And Losses
Annualized Damages And Losses
7.7 $731,546 $37,822
11.5 $1,061,846 $60,528
23 $1,825,214 $79,357
Total Annualized Damages
$177,707.00
Close
About (Ctrl+A)
About
STRUCTURE BCR: 0.00
Save and Continue
Utilities ($/day)
Buildings ($/day)
Roads/Bridges ($/day)
corner of the table. All damages are in dollars.
Temp Pipeline (
Utilities (days)
Roads (days)
View Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field: Historic damages before mitigation
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

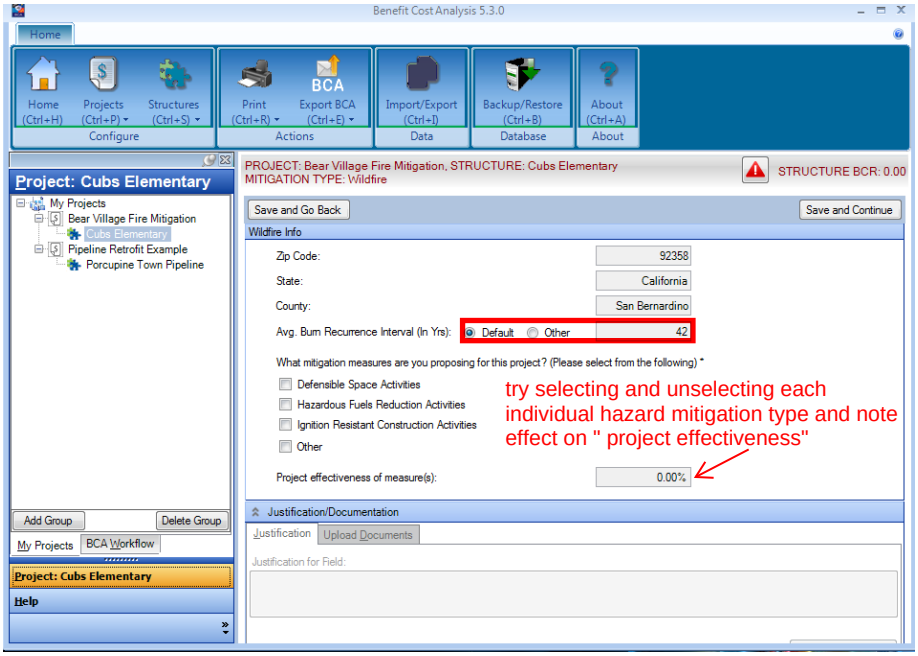

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Tow...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part of
STRUCTURE BCR: 2.99
Save and Go Back
Save and Continue
Damages After Mitigation
Analysis year 2018
Year Built 1997
Analysis Duration 22
User Input Analysis Duration
Utilities ($/day)
Buildings ($/day)
Roads/Bridges ($/day)
Damages After Mitigation
Recurrence Interval (RI)
Bridge Damage ($
Pipeline Damages ($
Temp Pipeline ($
Utilities (days)
Roads (days)
10.0 $0 $0 $0
100.0 $35,000 $0 2
500.0 $35,000 $0 2
View Damages
Justification/Documentation
Justification
Upload Documents
Justification for Field: Unknown Frequency - Damages after Mitigation
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help

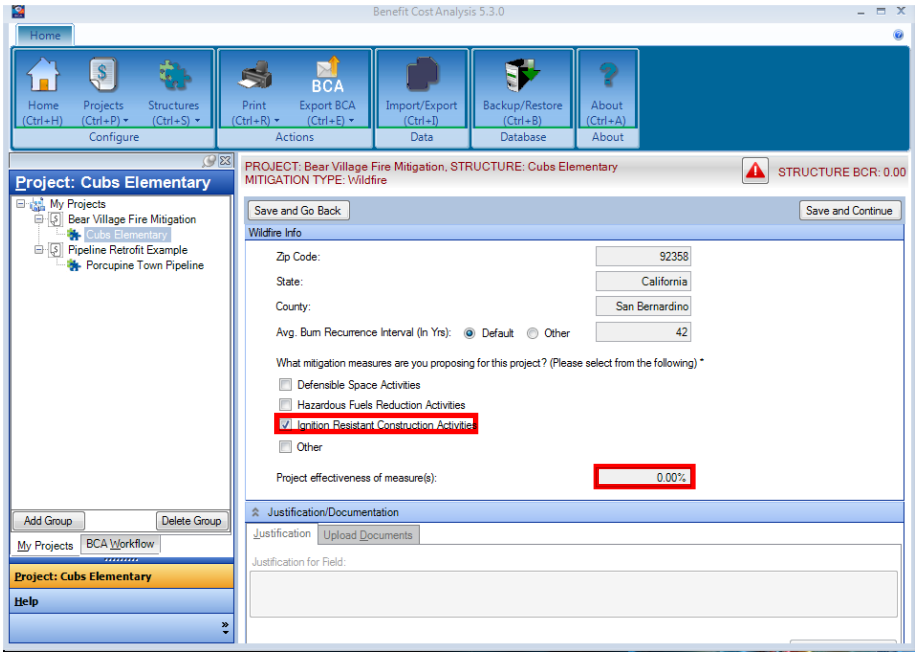

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Porcupine Tow...
My Projects
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Porcupine Town Pipeline
Help
PROJECT: Pipeline Retrofit Example, STRUCTURE: Porcupine Town Pipeline
MITIGATION TYPE: Damage-Frequency Assessment - Replace and realign part of
STRUCTURE BCR: 2.91
Save and Go Back
Save and Continue
Benefit-Cost Ratio Calculation Results
Annual
Present Value
Before Mitigation
$ 177,707
$ 2,452,489
After Mitigation
$ 5,165
$ 71,281
Mitigation Benefits
$ 172,542
$ 2,381,208
Mitigation Benefits
$ 2,381,208
Mitigation Costs
$ 819,004
Benefit-Cost Ratio
2.91

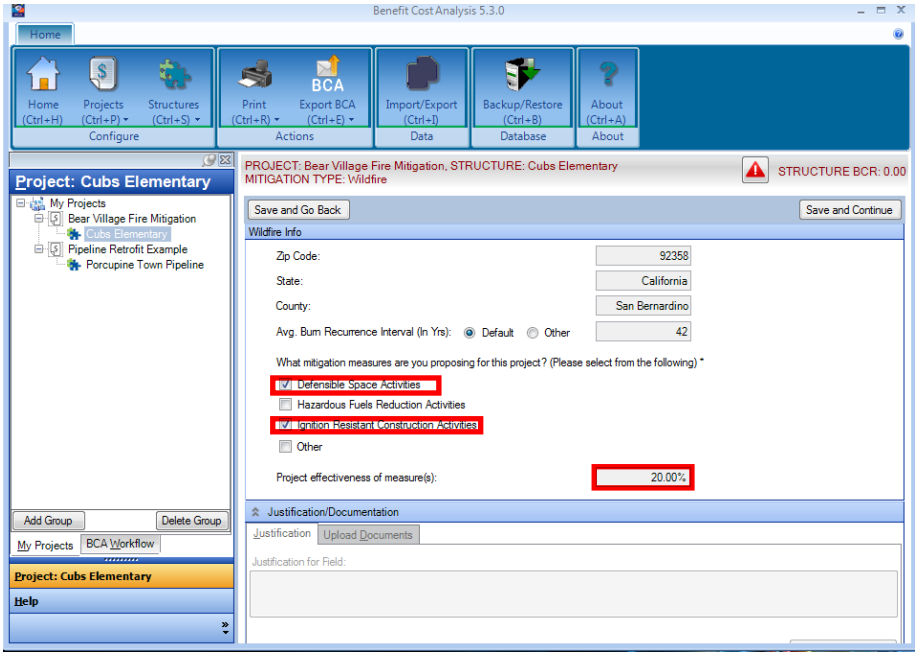
Wildfire Module Example

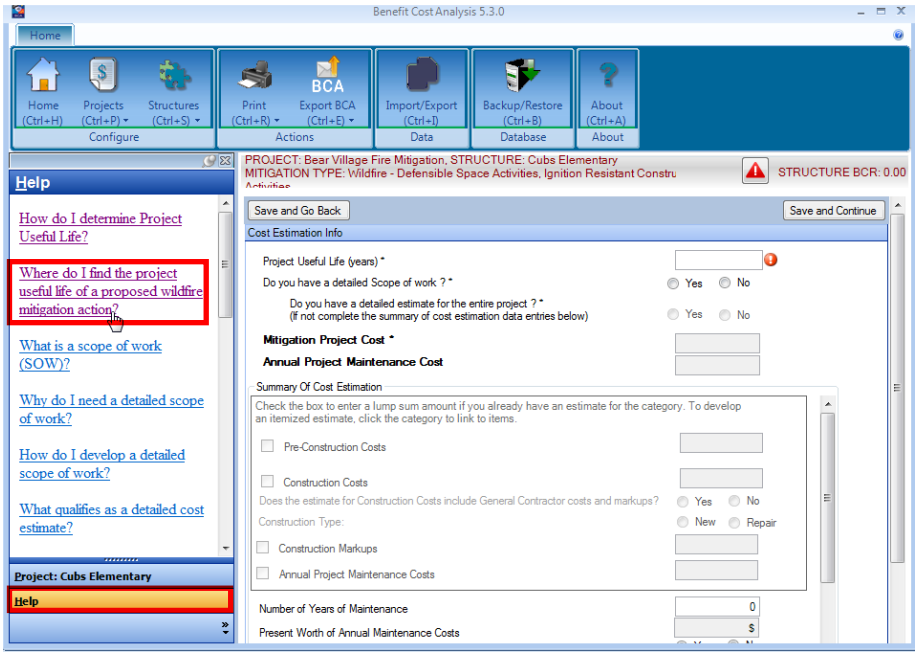


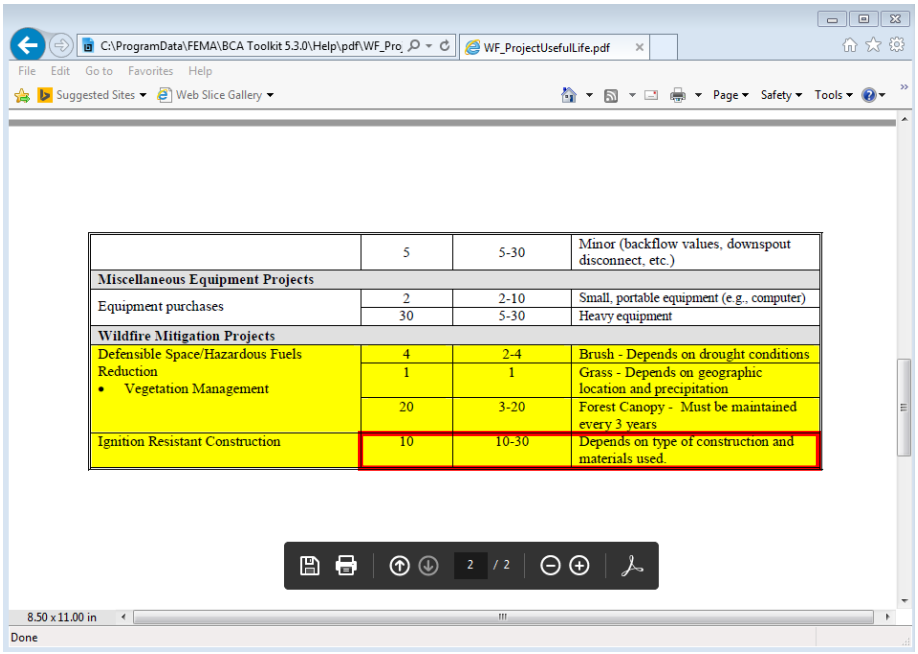



Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Wildfire Info
Zip Code: 92358
State: California
County: San Bernardino
Avg. Burn Recurrence Interval (In Yrs): Default Other 42
What mitigation measures are you proposing for this project? (Please select from the following) *
Defensible Space Activities
Hazardous Fuels Reduction Activities
Ignition Resistant Construction Activities
Other
Project effectiveness of measure(s): 0.00%
try selecting and unselecting each individual hazard mitigation type and note effect on " project effectiveness"
Justification/Documentation
Justification
Upload Documents
Justification for Field:

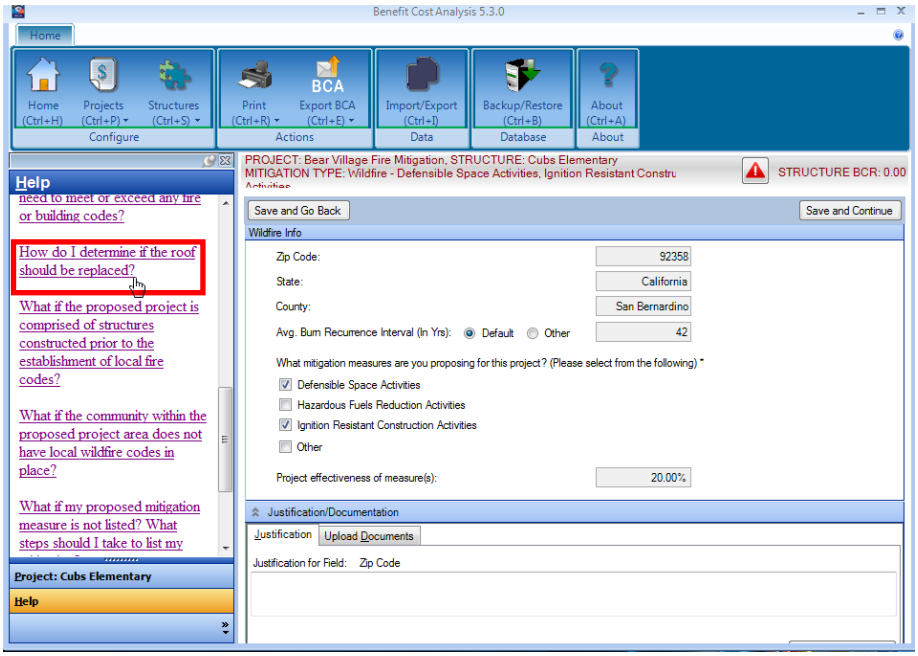

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Wildfire Info
Zip Code: 92358
State: California
County: San Bernardino
Avg. Burn Recurrence Interval (In Yrs): Default Other 42
What mitigation measures are you proposing for this project? (Please select from the following) *
Defensible Space Activities
Hazardous Fuels Reduction Activities
Ignition Resistant Construction Activities
Other
Project effectiveness of measure(s): 0.00%
Justification/Documentation
Justification
Upload Documents
Justification for Field:

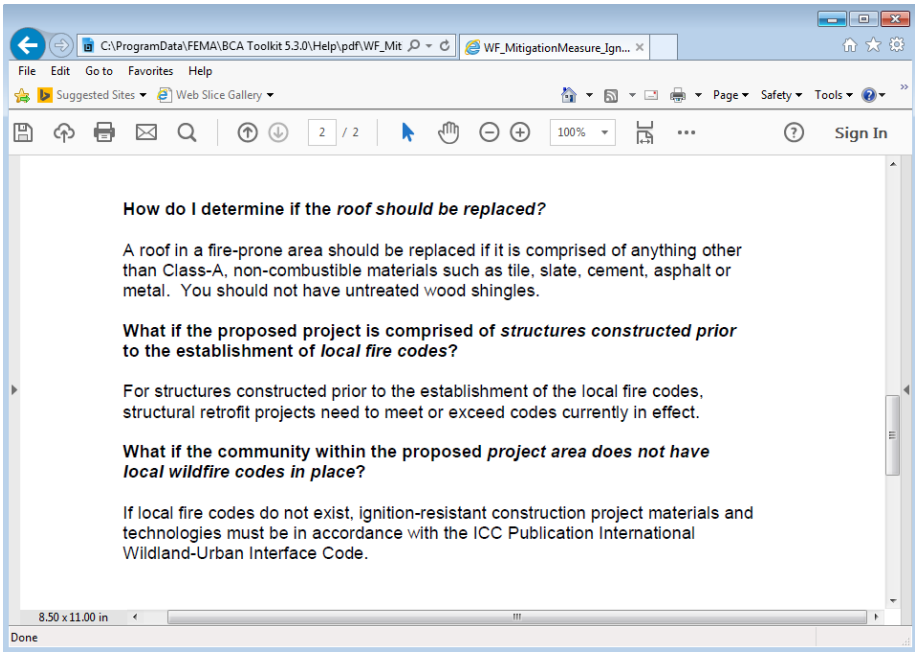

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Wildfire Info
Zip Code: 92358
State: California
County: San Bernardino
Avg. Burn Recurrence Interval (In Yrs): Default Other 42
What mitigation measures are you proposing for this project? (Please select from the following) *
Defensible Space Activities
Hazardous Fuels Reduction Activities
Ignition Resistant Construction Activities
Other
Project effectiveness of measure(s): 20.00%
Justification/Documentation
Justification
Upload Documents
Justification for Field:

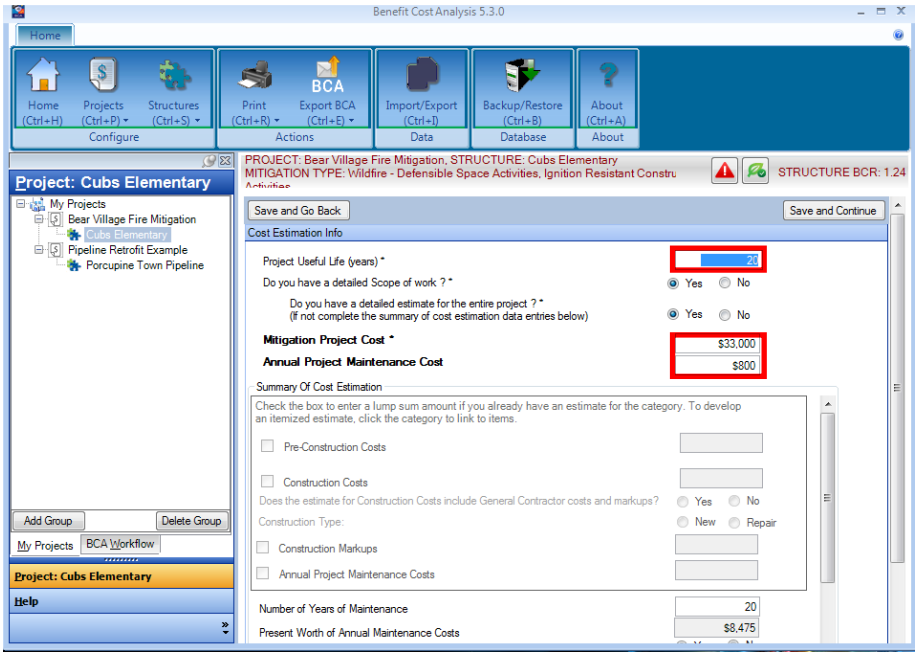

Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Help
How do I determine Project Useful Life?
Where do I find the project useful life of a proposed wildfire mitigation action?
What is a scope of work (SOW)?
Why do I need a detailed scope of work?
How do I develop a detailed scope of work?
What qualifies as a detailed cost estimate?
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 0.00
Save and Go Back
Save and Continue
Cost Estimation Info
Project Useful Life (years) *
Do you have a detailed Scope of work ? * Yes No
Do you have a detailed estimate for the entire project ? * (If not complete the summary of cost estimation data entries below) Yes No
Mitigation Project Cost *
Annual Project Maintenance Cost
Summary Of Cost Estimation
Check the box to enter a lump sum amount if you already have an estimate for the category. To develop an itemized estimate, click the category to link to items.
Pre-Construction Costs
Construction Costs
Does the estimate for Construction Costs include General Contractor costs and markups? Yes No
Construction Type: New Repair
Construction Markups
Annual Project Maintenance Costs
Number of Years of Maintenance 0
Present Worth of Annual Maintenance Costs $

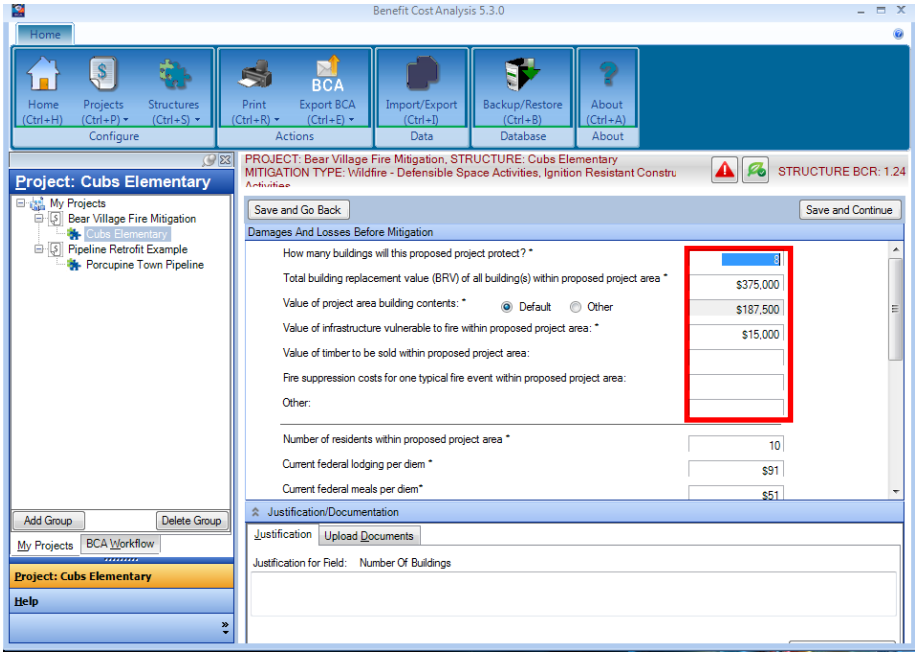


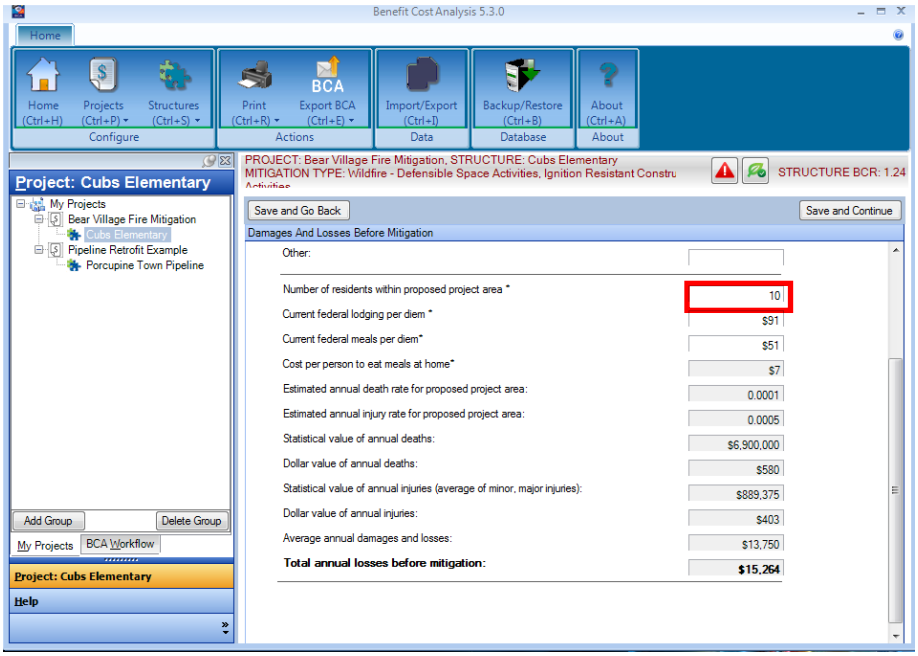
	5	5-30	Minor (backflow values, downspout disconnect, etc.)
Miscellaneous Equipment Projects			
Equipment purchases	2	2-10	Small, portable equipment (e.g., computer)
	30	5-30	Heavy equipment
Wildfire Mitigation Projects			
Defensible Space/Hazardous Fuels Reduction • Vegetation Management	4	2-4	Brush - Depends on drought conditions
	1	1	Grass - Depends on geographic location and precipitation
	20	3-20	Forest Canopy - Must be maintained every 3 years
Ignition Resistant Construction	10	10-30	Depends on type of construction and materials used.

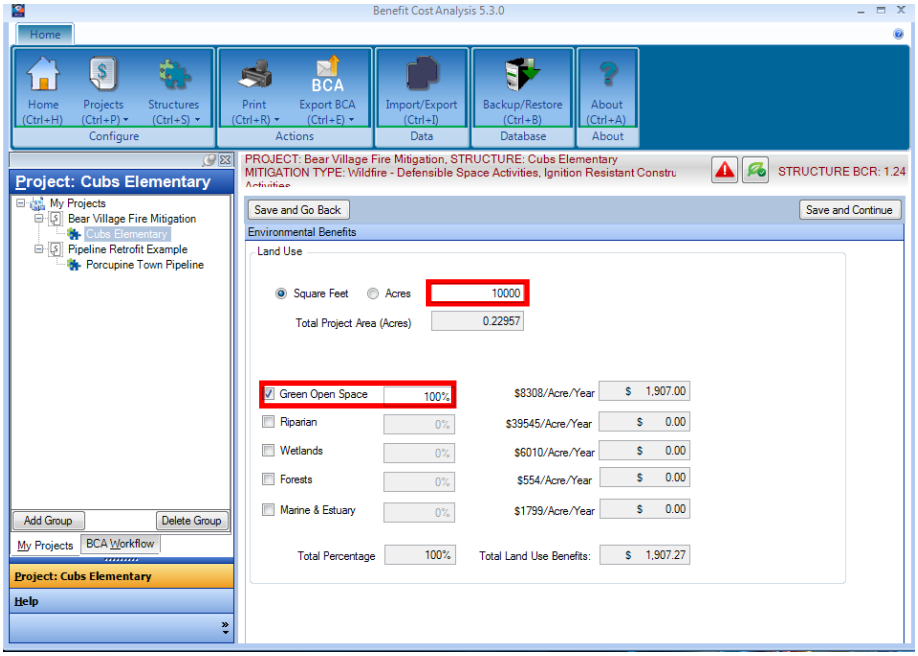


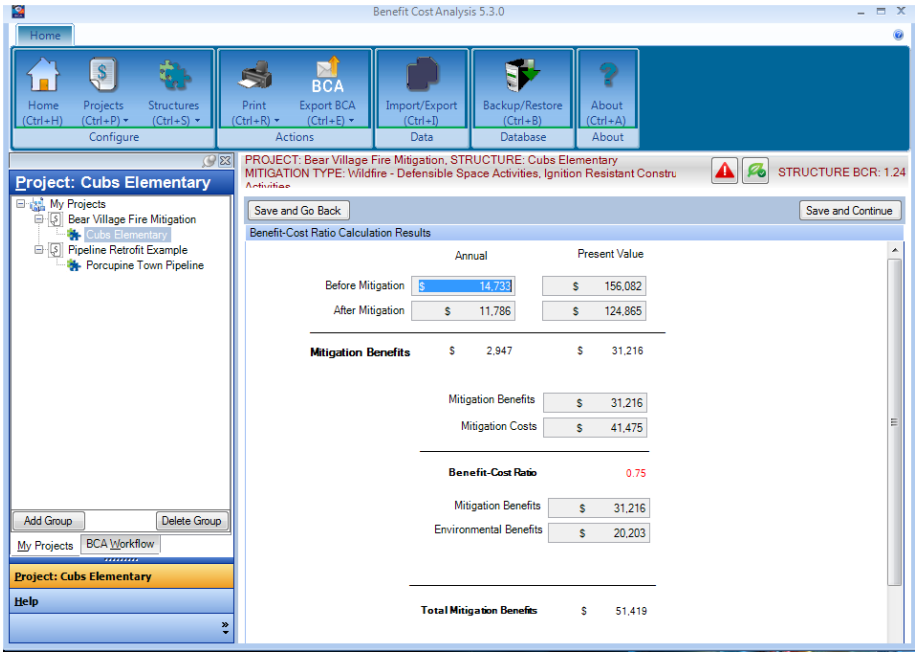

C:\ProgramData\FEMA\BCA Toolkit 5.3.0\Help\pdf\WF_Mit
WF_MitigationMeasure_Ign...
File Edit Go to Favorites Help
Suggested Sites
Web Slice Gallery
Page
Safety
Tools
2 / 2
100%
Sign In
How do I determine if the roof should be replaced?
A roof in a fire-prone area should be replaced if it is comprised of anything other than Class-A, non-combustible materials such as tile, slate, cement, asphalt or metal. You should not have untreated wood shingles.
What if the proposed project is comprised of structures constructed prior to the establishment of local fire codes?
For structures constructed prior to the establishment of the local fire codes, structural retrofit projects need to meet or exceed codes currently in effect.
What if the community within the proposed project area does not have local wildfire codes in place?
If local fire codes do not exist, ignition-resistant construction project materials and technologies must be in accordance with the ICC Publication International Wildland-Urban Interface Code.
8.50 x 11.00 in
Done


Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 1.24
Save and Go Back
Save and Continue
Cost Estimation Info
Project Useful Life (years) *
Do you have a detailed Scope of work ? *
Yes
No
Do you have a detailed estimate for the entire project ? *
(If not complete the summary of cost estimation data entries below)
Yes
No
Mitigation Project Cost *
$33,000
Annual Project Maintenance Cost
$800
Summary Of Cost Estimation
Check the box to enter a lump sum amount if you already have an estimate for the category. To develop an itemized estimate, click the category to link to items.
Pre-Construction Costs
Construction Costs
Does the estimate for Construction Costs include General Contractor costs and markups?
Yes
No
Construction Type:
New
Repair
Construction Markups
Annual Project Maintenance Costs
Number of Years of Maintenance
20
Present Worth of Annual Maintenance Costs
$8,475


Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 1.24
Save and Go Back
Save and Continue
Damages And Losses Before Mitigation
How many buildings will this proposed project protect? *
Total building replacement value (BRV) of all building(s) within proposed project area *
$375,000
Value of project area building contents: *
Default
Other
$187,500
Value of infrastructure vulnerable to fire within proposed project area: *
$15,000
Value of timber to be sold within proposed project area:
Fire suppression costs for one typical fire event within proposed project area:
Other:
Number of residents within proposed project area *
10
Current federal lodging per diem *
$91
Current federal meals per diem*
$51
Justification/Documentation
Justification
Upload Documents
Justification for Field: Number Of Buildings


Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 1.24
Save and Go Back
Save and Continue
Damages And Losses Before Mitigation
Other:
Number of residents within proposed project area *
10
Current federal lodging per diem *
$91
Current federal meals per diem*
$51
Cost per person to eat meals at home*
$7
Estimated annual death rate for proposed project area:
0.0001
Estimated annual injury rate for proposed project area:
0.0005
Statistical value of annual deaths:
$6,900,000
Dollar value of annual deaths:
$580
Statistical value of annual injuries (average of minor, major injuries):
$889,375
Dollar value of annual injuries:
$403
Average annual damages and losses:
$13,750
Total annual losses before mitigation:
$15,264


Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 1.24
Save and Go Back
Save and Continue
Environmental Benefits
Land Use
Square Feet
Acres
10000
Total Project Area (Acres)
0.22957
Green Open Space
100%
$8308/Acre/Year
$ 1,907.00
Riparian
0%
$39545/Acre/Year
$ 0.00
Wetlands
0%
$6010/Acre/Year
$ 0.00
Forests
0%
$554/Acre/Year
$ 0.00
Marine & Estuary
0%
$1799/Acre/Year
$ 0.00
Total Percentage
100%
Total Land Use Benefits:
$ 1,907.27


Benefit Cost Analysis 5.3.0
Home
Home (Ctrl+H)
Projects (Ctrl+P)
Structures (Ctrl+S)
Configure
Print (Ctrl+R)
Export BCA (Ctrl+E)
Actions
Import/Export (Ctrl+I)
Data
Backup/Restore (Ctrl+B)
Database
About (Ctrl+A)
About
Project: Cubs Elementary
My Projects
Bear Village Fire Mitigation
Cubs Elementary
Pipeline Retrofit Example
Porcupine Town Pipeline
Add Group
Delete Group
My Projects
BCA Workflow
Project: Cubs Elementary
Help
PROJECT: Bear Village Fire Mitigation, STRUCTURE: Cubs Elementary
MITIGATION TYPE: Wildfire - Defensible Space Activities, Ignition Resistant Constru
STRUCTURE BCR: 1.24
Save and Go Back
Save and Continue
Benefit-Cost Ratio Calculation Results
Annual
Present Value
Before Mitigation
$ 14,733
$ 156,082
After Mitigation
$ 11,786
$ 124,865
Mitigation Benefits
$ 2,947
$ 31,216
Mitigation Benefits
$ 31,216
Mitigation Costs
$ 41,475
Benefit-Cost Ratio
0.75
Mitigation Benefits
$ 31,216
Environmental Benefits
$ 20,203
Total Mitigation Benefits
$ 51,419