

# Building heights on Captiva

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The revisions in the base flood elevation (BFE) for Captiva Island, approved by the Federal Emergency Management Agency (FEMA) in 2006 (and partially revised in 2008), served as a reminder to Captivans that even minor changes in BFE could have a serious impact on structures given the island's long-standing building height restrictions.

The current height restrictions, enacted in the 1990s, capped building heights at 42 feet above "mean sea level" or 35 feet above "average grade of the lot." This language was adopted in reaction to concerns about even-taller homes being built on the island, in an effort to strengthen existing height regulations under a uniform cap.

In theory, this standard works. In practice, on a barrier island in which multiple layers of government may impose BFE rules, it meant that homes with higher BFE requirements were squeezed under the uniform restrictions, encroaching on living space. This has been evident with ceiling heights (particularly in second stories) which have been cramped and architectural elements (roof lines) which have been flattened or eliminated in an effort to stay under the 42/35 cap while still allowing something taller than eight-foot-high ceilings.

The issue was particularly acute for those lots seaward of the state's 1991 Coastal Construction Control Line (CCCL), a line of jurisdiction established based on the estimated damages resulting from a so-called 100-year storm event (a storm of such severity that, in theory, it should strike the coastline only once in every 100 years) to an island's shoreline and the adjacent upland properties and structures. Construction seaward of the 1991 CCCL requires approvals from the Florida Department of Environmental Protection (FDEP), including setting the mandated elevation for a structure's lowest horizontal structural member.

Typically, FDEP sets those elevations 2-3 feet higher than the FEMA-mandated BFEs, along with setting other construction requirements (such as requiring lowest horizontal structural members to be at or above the minimum BFE, not at or below as is allowed landward of the CCCL) to help ensure that structures seaward of the 1991 CCCL have a better design likelihood of surviving storm winds and waves intact, or with a minimum of damage. However, under a uniform maximum building height cap as exists on Captiva, any increase in FDEP-mandated construction elevations eats into buildable area in order to accommodate all the necessary structural and HVAC requirements -- meaning lower ceiling heights for no good reason except to maintain building height uniformity.

There are several BFE zones which affect buildable lots on Captiva, ranging from VE-13 on the seaward-most lots on the Gulf to AE-12, -11, -10 and -9 further inland. There is also an area, dubbed the "X Zone," on the bayside of the Village, where BFE requirements were eliminated in the last FEMA revision. In other words, there is no federally mandated base flood elevation in the X zone.

When the last series of FEMA elevation changes caused building heights in some areas to move a little higher -- and, inexplicably, some areas to move lower or without BFE requirements altogether -- some property owners saw that a uniform building height regulation was not uniformly fair to island property

owners. The uniform height problem would become an even greater issue in the event of a catastrophic storm in which might cause structural damage sufficient to require rebuilding under the new code language. Since (unlike most county communities) Captiva's height regulations are encoded in the Lee Plan, they have the same legal status as the county's buildback policy -- which could create an administrative conflict in the event of a structure-damaging storm where one section of the Lee Plan limits building heights lower than another portion of the Lee Plan allows in the event of buildback.

Accordingly, the Captiva Community Panel sought to investigate its options as part of its planned update of the Lee County Land Development Code (LDC) as it affects Captiva Island. The current building height language was already in place in both the LDC and the Lee Plan, incorporated into the latter in 2003 as a show of the island's commitment to maintain low-rise structures without the option for variance and to withstand any legal challenge. The Panel's feeling was this planned LDC revision process was the ideal opportunity to engage islanders in a discussion about building heights. If the Panel could identify a consensus in support of change, it would recommend amended language to the Board of County Commissioners. In any case, the panel would provide a forum for community dialogue on the subject.

At a series of meetings and workshops open to the public and advertised or announced, the Panel's planner first offered background on building heights and the impact of various changes, then proceeded to offer a number of drafts of new language to provoke discussion and refinement through public input and interaction. (A chronology of meetings and actions is attached; minutes and/or recordings of all of them are available on request.)

What eventually emerged was a concept of creating a consistent building "envelope" atop whatever BFE requirement governed a particular island lot. All property owners would thus be assured 28 feet of buildable height on top of the governing BFE requirements, which would allow a two-story home with 9- to 10-foot ceilings for both floors... perhaps more for one and less for the other, if that was a design choice. Also, by measuring building height from the *mean roof height* (rather than the absolute peak), some allowance for moderate architectural embellishment was afforded to designers; in return, however, the overall height and mass of such accoutrement was limited to eight feet over the mean roof height, rather than the unlimited amount allowed under current LDC language.

For those homes in the X Zone, the existing uniform building height rules were kept in place, so those owners could decide whether to build a multi-storied structure with minimal mandated elevation and adjacent parking or (given the rather limited lot sizes in the X Zone) elevate the structure to allow parking underneath while still making possible two stories with reasonable ceiling heights as could be achieved under the current rules.

After a working LDC draft was finalized by the panel in May 2010, the group decided to offer islanders the opportunity for input through an online community survey, targeting eight questions covering four main areas (including building heights) to allow feedback on the proposed code changes. Voters and property owners were notified how to access this survey via postcard, and allowed one survey per property owned or voter registration maintained. The survey opened Aug. 20, 2010 and closed Sept. 30, 2010, with final results presented to the panel and public at its Oct. 19, 2010, meeting.

The results were:

- Total responses 430
- Accepted responses 384 (89.3%)

- Disputed responses 46 (10.7%)
  - No STRAP or voter ID 24
  - Duplicate ID, older responses 18 (likely changed answers)
  - Duplicate ID, incomplete responses 3 (likely abandoned)
  - Duplicate voter ID 1
- 430 total responses out of 1,510 mailed (28.47% response)
- 95 voters responded out of 361 mailed (26.3%)
- 374 property owners responded out of 1,149 mailed (32.55%)

**HEIGHT RESTRICTIONS:** Allow owners to construct at least a two-story, 28-foot-high home over base flood elevation, even in areas of the island where federal or state requirements force structures to be built higher above sea level. (Areas where no minimum flood elevations are required must build no higher than 42 feet above sea level or 35 feet above average grade.) Measurement of height will begin at the lowest horizontal member, and will end at the mean (middle) of the roof slope (Sec. 33-532(A and C)). This proposal will maintain the "no variance" policy for building heights allowed on the island.

- Support 187 49.73%
- Don't support 180 47.87%
- Don't know 9 2.39%

**As a straight "Yes-No" question: 50.95% support ... 49.05% don't support.**

Zones	Support		Don't support		Don't know		Responses
Total	187	49.73%	180	47.87%	9	2.39%	376
Gold Coast	46	52.87%	40	45.98%	1	1.15%	87
Tween Waters	18	54.55%	13	39.39%	2	6.06%	33
Village	65	44.52%	77	52.74%	4	2.74%	145
South Seas	58	52.73%	50	45.45%	2	1.82%	110

**HEIGHT RESTRICTIONS:** Encourage more sloped roofs (resulting in less boxiness or bulk) and more roof articulation (details such as cupolas, etc.), but set a limit on how high and large this articulation can be (four feet above roof peak or eight feet above sea level) and not to exceed 20% of the total front facade area (Sec. 33-532(A)).

- Support 193 51.88%
- Don't support 161 43.28%
- Don't know 18 4.84%

**As a straight "Yes-No" question: 54.52% support ... 45.48% don't support.**

Zones	Support		Don't support		Don't know		Responses
Total	193	51.88%	161	43.28%	18	4.84%	372
Gold Coast	49	57.65%	34	40.00%	2	2.35%	85
Tween Waters	21	63.64%	9	27.27%	3	9.09%	33
Village	62	42.76%	75	51.72%	8	5.52%	145
South Seas	61	55.96%	43	39.45%	5	4.59%	109

After these results were released and discussed publicly, the panel took another look at the LDC draft -- and, in particular, the building height issue. Prompted both by the survey responses and by public feedback that the rules being proposed for the island might not work as well for the unique Village properties, the panel voted at its Dec. 14, 2010, meeting to exempt the Village from the proposed rule revision and retain the existing uniform building height rules for that area while encouraging residents and property owners there to discuss the issue and report back to the panel with feedback.

The Panel reaffirmed its willingness to support a Village exemption at its Jan. 11, 2011, meeting, provided they could be assured that Village residents supported the exemption. The Panel sought input from Village residents at a Jan. 20, 2011, informal workshop, where the desire for the uniform-height standard and the definition of the Village itself was again confirmed.

To ensure that as many Village residents as possible are heard from regarding this important issue, at its March 8, 2011, meeting the Panel voted to conduct a mail survey of all Village property owners to assess the consensus on which building height standard should be applied to the Village -- the new islandwide standard being proposed or the existing standard. Postcards were mailed with a return date of April 1, 2011, and the following was the result

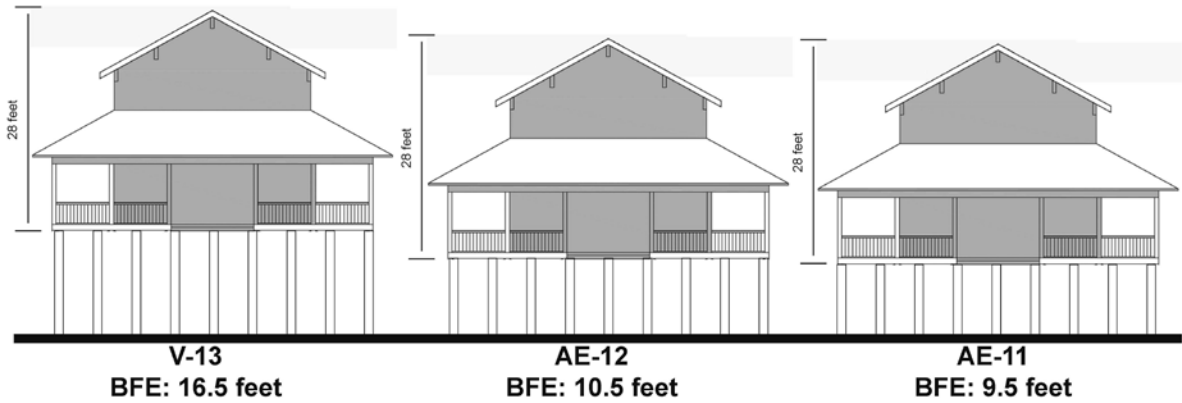
- Total surveys mailed: 330
- Total mailings returned as undeliverable/uncountable: 10 (3.0%)
- Total cards returned: 139 (42.12%)
- **Supports a new islandwide building height standard as proposed: 82 (58.99%)**
- **Supports maintaining the current building height standard in the Village: 57 (41.01%)**

After discussion, at its April 12, 2011, meeting the Panel voted to remove the Village exemption and instead submit an islandwide building height language as originally worded. It also voted to hold a public meeting solely focused on building heights and the draft LDC on April 26, 2011, in order to make a decision on building height language to keep the proposed Lee Plan amendment on building heights on schedule. County building and planning staff members would be in attendance to make comments and answer islanders' questions. This meeting was advertised in the local newspaper and through the email list, and those who could not attend or who had very specific questions were asked to submit them to kengooderham@gmail.com.

— ***Ken Gooderham, administrator***

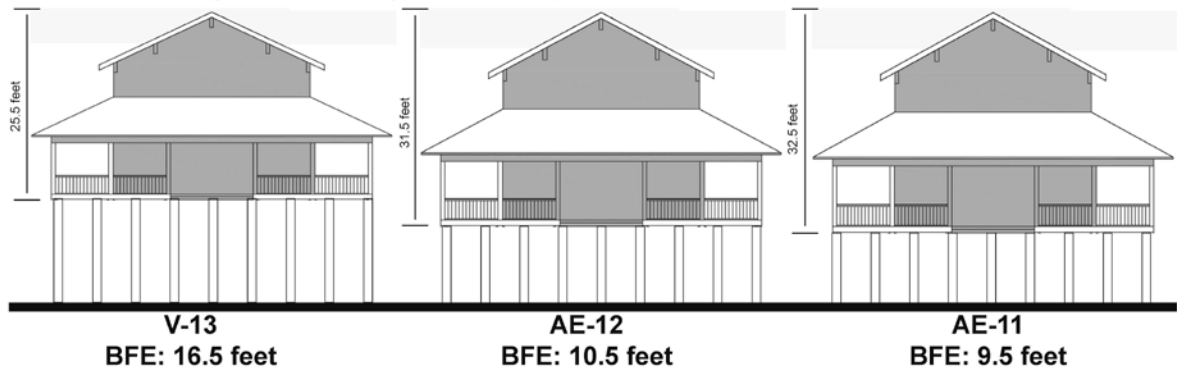
***Proposed islandwide height standard:***

Same building "envelope," overall height higher or lower depending on lot's base flood elevation.

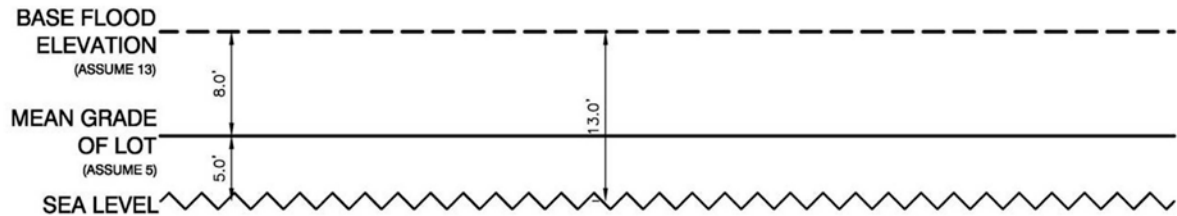


***Proposed Village exemption (current height standard):***

Uniform 42-foot height limits, building "envelope" expands or compresses based on lot's base flood elevation



***Three elevation terms to remember:***



# Maximum building heights chart

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FIRM Flood zone	Base elevation (above sea level)	A. Lowest possible horizontal member	B. Maximum vertical distance to: (1) Peak of flat roof OR (2) Mean of slope	C. Additional vertical articulation <sup>1</sup>	D. Illustrative building height (A+B+C)=D	Comment
<b>VE 13 (CCL)<sup>2</sup></b>	16.5	16.5	28.0	8.0	52.5	Seaward of 1991 Coastal Construction Control Line (extreme case)
<b>AE 12</b>	12.0	~10.5 <sup>3</sup>	28.0	8.0	~46.5	
<b>AE 11</b>	11.0	~9.5	28.0	8.0	~45.5	
<b>AE 10</b>	10.0	~8.5	28.0	8.0	~44.5	
<b>Zone X</b>	0	0	35.0 <sup>4</sup>	0	42.0 <sup>5</sup>	

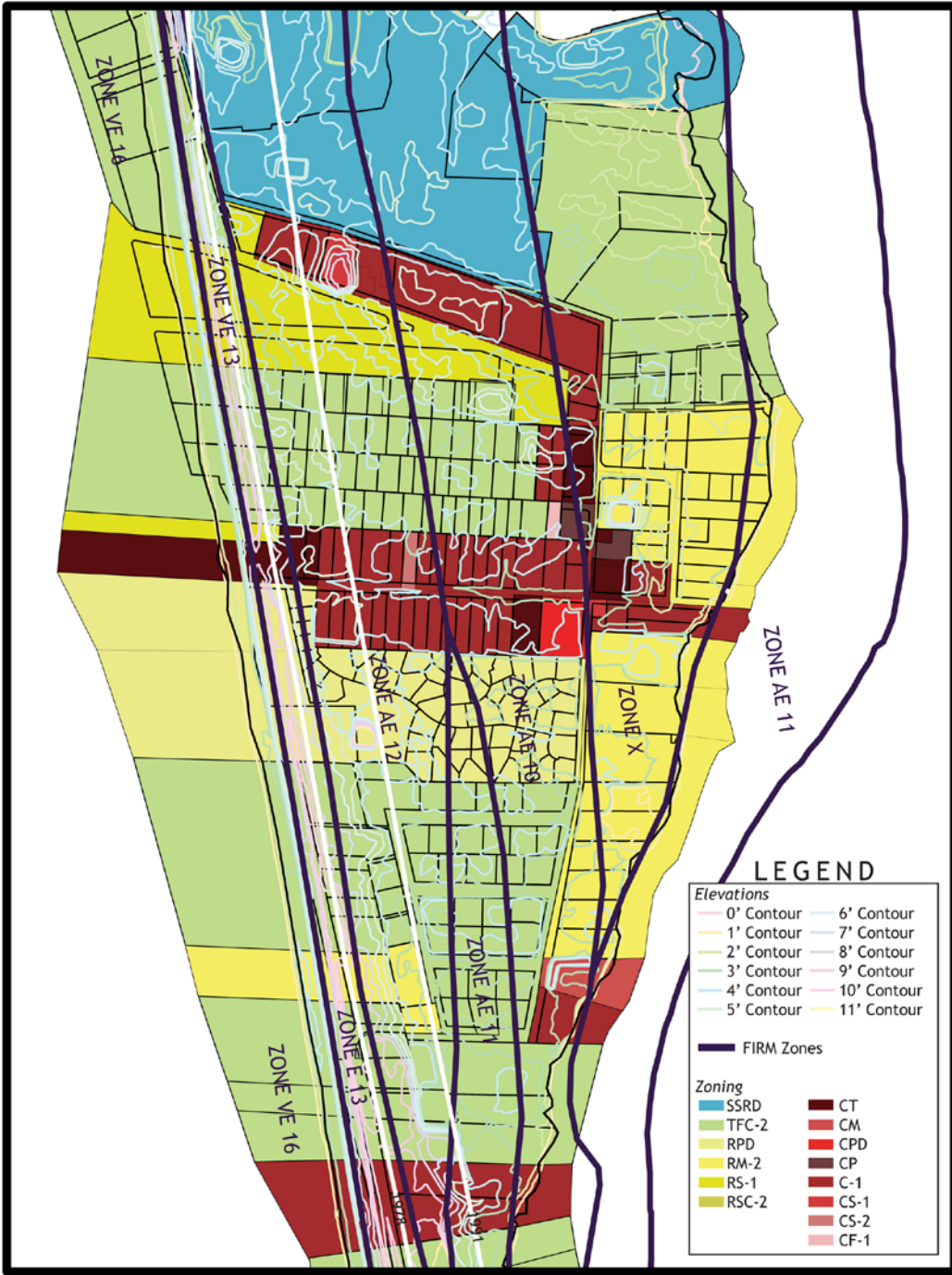
<sup>1</sup> 8 feet above peak of flat roof or 4 feet above the peak of a sloped roof, whichever is lower. For illustrative purposes, assume an additional 8 feet above the mean of the roofline.

<sup>2</sup> Structures seaward of the Coastal Construction Control Line (i.e. closer to the active wave zone) are typically required to be elevated higher than the FIRM flood zone elevation, and the lowest possible horizontal structural member must be no lower than this required elevation (unless what is required in other zones).

<sup>3</sup> For flood insurance purposes, base elevations in AE flood zones are measured from the finished floor. These illustrations assume that the lowest horizontal member will be approximately 18 inches lower.

<sup>4</sup> Peak of roof. The mean of slope option is not available in the X zone.

<sup>5</sup> In the X zone, residential units may be built to 35.0 feet above the mean grade of the lot or 42.0 feet above sea level, whichever is lower. This is the current building height restriction standard for Captiva.



# CAPTIVA CODE REVISIONS 'The Village'

February 2010



# Panel meeting chronology

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**June 2009:** Draft 7 of proposed Land Development Code (LDC) finalized, panel decides to issue a Request for Proposals for a planner to address four areas of concern: Height restrictions, RSC-2 zoning, mangrove protection, signs. This was the culmination of more than two years of on-and-off efforts to draft a new LDC for Captiva.

**July 2009:** Proposals from five planners reviewed by the panel at its public meeting.

**August 2009:** Planner hired (Morris-Depew Associates Inc.) based on recommendation from a panel subcommittee.

**September 2009:** Grant application with Lee County initiated, planner reviews current LDC draft.

**October 2009:** Planner presents Draft 9, sets workshop review schedule at Oct. 13 panel meeting; workshop on mangroves and water quality held Oct. 27.

**November 2009:** Workshop discussions reviewed at Nov. 11 panel meeting.

**December 2009:** Workshop on height restrictions held on Dec. 1. Discussions reviewed at the Dec. 8 panel meeting, RSC-2 zoning options discussed.

**January 2010:** Workshop on height restrictions and RSC-2 zoning issues held Jan. 7. Discussions reviewed at the Jan. 12 panel meeting. Another workshop on height restrictions and RSC-2 issues held Jan. 28.

**February 2010:** Workshop discussions reviewed at the Feb. 9 panel meeting. Another workshop on height restrictions (with specific requests to planner for illustrations of options) and signs held Feb. 18.

**March 2010:** Discussions reviewed at the March 9 panel meeting. Revisions suggested, reviewed at a special panel meeting March 24. Draft 12E was adopted by the panel as a final staff draft (working draft) of the LDC proposals at the end of the March 24 meeting.

**April 2010:** Discussions reviewed at the April 13 panel meeting, and a decision was made to allow electronic surveying of the community on the proposed LDC draft. A special meeting on the proposed rental restrictions was held April 27, where the islandwide restrictions were deleted from the working draft and additional research was requested.

**May 2010:** Research was reviewed at the May 11 panel meeting, where the RSC-2 specific restrictions were deleted from the working draft and the final proposed LDC draft was accepted. A survey committee was formed to refine the staff draft of survey questions and report back to the panel to devise a final survey draft.

**June 2010:** The idea of an online community survey was discussed, and necessary bylaw changes were advanced to make this possible.

**July 2010:** A draft of the proposed survey (including structure and graphics) was developed and approved by the panel.

**August 2010:** The final version of the survey was approved at a public meeting. All registered voters and property owners were notified by postcard in on Aug. 20 and Sept. 1, with additional information provided in the local weekly newspaper and to an islandwide email message send to a maintained list twice. A Sept. 30 deadline was established, with a report to the panel at a public meeting in October.

**September 2010:** A retainer with Max Forgey/Forgey Planning Services is approved to allow Forgey to continue his role as the panel's planning consultant begin during his work with Morris-Depew.

**October 2010:** Survey results were extensively discussed at an Oct. 19 public meeting, which was publicly noticed. The panel voted to send the May 2010 LDC draft to county staff for comments while continuing to review and discuss survey results and comments at its November meeting.

**November 2010:** Discussion continued on the LDC draft and survey, with the panel opting to more thoroughly review the language in conjunction with expected county reaction to draft language.

**December 2010:** After further discussion, the panel voted to exempt the Village from the proposed new building height regulations and allow it to stay under the existing uniform-height rules. More input from Village residents was solicited on this and any other LDC issues the Village wanted to address, and panel consultants were instructed to work with residents as requested.

**January 2011:** The panel confirmed its support for a Village exemption to the new building height rules, and a Village workshop was scheduled later in the month to discuss Village boundaries and issues. At that workshop, a definition for the Village was confirmed and the decision was to limit the discussion to building heights at this point and report this discussion back to the panel at its Feb. 8, 2011, public meeting.

**February 2011:** After concerns about how the Village was defined for the purposes of the exemption were raised by a property owner, that item was put on the March 2011 meeting agenda.

**March 2011:** After discussion about how the Village would be defined and the efforts which brought the proposed Village exemption into being, the panel voted to conduct a mail survey of Village property owners to determine whether they wanted to be covered by the proposed new building height language or be exempted to stay under the existing height restrictions. The panel extends its retainer with Forgey Planning Services for an additional six months.

**April 2010:** Results from the Village survey on building heights were presented and discussed, and the panel then voted to remove the exemption and stay with an islandwide building height language as originally proposed. The panel also voted to hold a public meeting on April 26 solely focusing on building heights and the current LDC draft, where islanders could submit questions in advance or ask questions of key county staff members on building height and LDC issues.

All panel meetings are recorded and have minutes posted on the panel Web site; meetings are advertised in the island's weekly newspaper. All panel workshops are recorded and noticed in the island weekly newspaper. Both events are noticed to an islandwide email list, and materials are posted on the panel Web site in advance when possible ([www.captivacommunitypanel.com](http://www.captivacommunitypanel.com)). All panel events are open to the public and provide opportunities for public comment on agenda items and otherwise.