

PARTIAL TRANSCRIPT PUBLIC INFORMATION HEARING

SKAGIT COUNTY FIS FINAL COORDINATION MEETING

7:30 PM THURSDAY, JUNE 14, 1984

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2 **CHUCK STEELE, FEMA:** ...The question then becomes, "Where is a safe
3 place to build. The problem, is that if you allow indiscriminate
4 development in the floodplain, the problem is the same as what
5 happens when you get into a full bath tub. You get into a bath tub
6 the water goes up. If you build anywhere in the floodplain the water
7 is going to be blocked, diverted, its got to go somewhere and its
8 going to harm other people. ... The basic thing the county has to
9 do is to adopt regulations that say we will not worsen the
10 situation.

11

12 ... In some states, they allow no rise in the floodwaters. The
13 minimum federal criteria is one foot. Once you reach the one foot
14 rise then no further development can occur.

15 We do not have a floodway in the lower delta area. But there is a
16 floodway upstream.

17 ...There is no good reason for a variance in this area...

18

AO ZONES

19 **Steele:** AO Zones are very difficult to deal with. These are the
20 floodplain management measures the county needs to have in their
21 ordinance. Extensive AO zones south of Mt. Vernon. We are
22 recommending that the county adopt considerably more stringent
23 floodplain management measures adjacent to the levees and in the
24 other AO zones especially where there are fast velocities. We are
25 recommending engineering foundations or post and pier construction.
26 In order that the water can flow thru. This is a dangerous area.

27

SPREADING THE RISK

28 **Steele:** The concept that is involved here is spreading the risk for

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1 insurance purposes. We need to show what the risk would be basin
2 wide in the entire delta as opposed to any point in the delta. As
3 we point out in the report at any given on the map the flood
4 conditions could be a whole lot worse than what we are showing on
5 these maps. If a levee were to break in a particular area the depths
6 and velocities could be a whole lot worse than what we are showing
7 on these maps. We just can't predict where that could happen. So
8 therefore you have a situation that is understating the case for many
9 people but the averages of what could happen throughout the entire
10 delta are depicted on the map.

11 We played around with the density concept at the request of the
12 flood control committee. We analyzed that and came up with a figure
13 of you could build about 10% of your property. The problems and
14 questions that were raised were just too much to deal with so we
15 dropped that concept. We dropped the concept from the study but we
16 feel that it is very much a live concept with relationship to the
17 City of Burlington.

18 The approach we used was we accepted the COE figure of 240,000 cfs
19 at Sedro Woolley was the 100 yr flood. We kept 110,000 cfs in the
20 channel, without the levees. We essentially said the levees weren't
21 there. We had a 130,000 cfs overland.

22 FLOODWAYS

23 **Steele:** Floodways were not determined for reasons stated here (IV.
24 HYDRAULIC ANALYSES). No particular floodflow path was inherently
25 more efficient than others. Uncertainty of where levees would
26 break. Floodways at this point have not been designated.

27 **QUESTION FROM AUDIENCE:** Just for point of clarification. The
28 floodways you are referring to are regulatory floodways is that
29 correct? There is a difference between regulatory floodways and

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1 floodways as administered by the state is there not?

2 STEELE: Yes. That is correct!

3 SPECIAL REQUIREMENTS FOR SKAGIT COUNTY AND BURLINGTON FOR RETENTION
4 OF CONVEYANCE IN FLOW PATH I

5 STEELE: One thing I would like to spend some time on is the
6 encroachment standard in the Burlington area. This is a very
7 difficult situation. Hovering in the back of this thing is always
8 the possibility that ... FEMA could always come back and do a
9 floodway at some point. The mechanics are there to do a floodway.
10 In lieu of the floodway what must be applied is the encroachment
11 standard. This encroachment standard is best described by reading it
12 to you. NOTE: Mr. Steele read 44 CFR SEC 60.3C(10). What that
13 basically means is that an engineering analysis would be required in
14 certain areas where there is a blockage problem. A particular area
15 that comes to mind is in Burlington. The area in south Burlington.
16 For if that area was to become blocked up, again the flows got to go
17 somewhere. Again, the optimum is always there for us to come in and
18 run a big ole floodway thru that area. The way we interpret this
19 encroachment standard in the Burlington Area is not the same way we
20 interpret it along other rivers. What we are saying here is that
21 for single family residences I don't see the need for engineering
22 analysis. But for larger scale development like the Cascade Mall
23 for example, a person would have to go out and hire an engineer to
24 find out if that encroachment would cause a problem. The mall people
25 did do that and they did make some changes after they found out they
26 would cause some impacts. That encroachment standard has to be
27 enforced particularly in the City of Burlington.
28
29 . . . When you say that development plus the cumulative effect that
30 means everybody... So there is a big problem there unless the city
31 takes action.

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2 I would like to make this point. That is that the State Flood Zone
3 Act has almost an identical requirement. (WAC 508-60) We weren't
4 sure at first so we sent a letter to the state and they said, "Yep.
5 That's the same thing." So they have to do the same thing. . . The
6 City can't issue a permit until the State does. We are requiring
7 that in this ordinance. So before Burlington can issue a permit the
8 State has to issue a permit. Those are pretty serious criteria.

9 FLOOD PLAIN MANAGEMENT MEASURES IN LIEU OF FLOODWAYS

10 **Steele:** This is just a summary that has been banging around for
11 several years of just what the city and the county could do in terms
12 of coming up with measures in short of designating a floodway. You
13 may well use these to come up with a master plan. . . .

14 It would probably involve such things as prohibiting any solid fill
15 perpendicular to the flow of water. Cumulative fills would cause
16 that same sort of blockage. Thirdly, use minimum amt of fill
17 needed.

18 Fourthly, definitely designating certain natural drainageways, such
19 as Gages Slough, be closed off to any encroachment because that's
20 the natural channel. **It's an old channel of the Skagit River.**
21 Anything like the Gages Slough should be left in its natural state.
22 . . . if it gets any worse then we're going to have a major problem.
23 Similar low spots that have a similar characteristic should be left
24 alone as well. If you wanted to allow development in those adjacent
25 areas then you could require post, pier, pile construction.

26 . . . Finally, generally encouraging the use of post, pier, pile or
27 column-type construction to be sure that the underneath areas aren't
28 restricting the flow.

29 **The most important one is really the density criteria.** A

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1 combination of things could occur. Designating certain areas as
2 reserve, reserving lands for effective flow areas, post and pier
3 type construction and a density criteria. With a combination of
4 these, you may be more reasonable than that 75% stated by the flood
5 control committee and you may be more reasonable then our 10%. I
6 think that this would be seriously looked at by us... The method
7 that could be used to go about making this kind of a determination
8 would include, identifying low effective drainage areas and storage
9 areas and reserve them for passage of water. You would probably
10 have to go out and do a topography map first. That hasn't been
11 done. The second thing is I would go out and identify any strips of
12 land adjacent to these effective flow areas and I'm thinking
13 primarily of Gages Slough which is so messed up these days. That if
14 any new construction were allowed adjacent to the slough it would
15 have to be allowed using certain construction standards, that would
16 still allow the water to pass thru.

17 Thirdly, the cut and fill provisions that we talked about.

18 Fourthly, I would certainly consider this to be a major problem. I
19 would certainly consider acquisition programs, you have to start
20 someplace.

21 Fifth, I would seriously consider finding an engineer to compute the
22 density criteria we talked about earlier. There is a mythology that
23 could be used site specific in the south Burlington area for
24 example. And I also would reconsider flood control works like the
25 Avon Bypass.

26
27 **QUESTION FM AUDIENCE:** CHUCK, DO YOU HAVE ANY IDEA ON HOW ANY OF
28 THESE METHODS MIGHT BE FUNDED?

29 **Steele:** Yes. General obligation bonds for example. Its a matter

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1 of determining how you want to handle the problem. If you're looking
2 to the federal government for money you can forget it. There isn't
3 any. Its a matter of addressing that problem yourselves.

4 **STATEMENT FROM AUDIENCE:** if I interpret what your saying correctly,
5 your saying its not the federal government that's trying to develop
6 this area its the local people and it should be up to them to fund
7 these things.

8 **Steele:** Federal government is actively trying to not develop this
9 area. We actively sought to kill the Garl Street Improvement Project
10 under executive order 11988. We had to. It didn't comply with the
11 executive order. For federal money to be used it has got to comply
12 with the executive order. ...

13 ...MEETING ADJOURNED...