

WESTERN WEBER PLANNING COMMISSION

## **REGULAR MEETING AGENDA**

June 14, 2016 5:00 p.m.

- Pledge of Allegiance
- Roll Call:
- 1. Consent Agenda
- 2. Approval of the April 12, 2016 and the May 10, 2016 Meeting Minutes
- 3. Administrative Items
  - 3.1. Discussion on West Warren Park District Expansion
- 4. Legislative Items
  - 4.1. ZTA 2016-01 Consideration and recommendation on a proposal to amend the following sections of the Weber County Land Use Code: Definitions (§101-1-7), General Provisions (§102-1), Natural Hazards Overlay Districts (§104-27), Supplementary and Qualifying Regulations (§108-7) and Hillside Development Review Procedures and Standards (§108-14) to clarify that the Planning Commission is not the only land use authority over projects with natural hazards, and to provide clarity, remove redundancies, and include process steps and appeal provisions for natural hazards reviews.
- 5. Public Comment for Items not on the Agenda
- 6. Remarks from Planning Commissioners
- 7. Planning Director Report
- 8. Remarks from Legal Counsel
- 9. Adjourn to a Work Session

Work Session Agenda

WS1. Planned Residential Urban Development (PRUD) amendment to allow potential bonus density - Scott Mendoza

The regular meeting will be held in the Weber County Commission Chambers, in the Weber Center,1st Floor, 2380 Washington Blvd., Ogden, Utah.

Please enter the building through the front door on Washington Blvd. if arriving to the meeting after 5:00 p.m.

A Pre-Meeting will be held at 4:30 p.m. in the Commission Break Out Room. No decisions are made in the pre-meeting.

In compliance with the Americans with Disabilities Act, persons needing auxiliary services for these meetings should call the Weber County Planning Commission at 801-399-8791 Minutes of the Western Weber County Planning Commission held on April 12, 2016, in the Weber County Commission Chambers, 2380 Washington Blvd., Ogden UT, 6:00 p.m.

Members Present:Mark Whaley, Roger Heslop, Lance Greenwell, John ParkeMember Excused:Wayne Andreotti, Jannette Borklund, Michael SlaterStaff Present:Rick Grover, Planning Director; Jim Gentry, Principal Planner; Courtlan Erickson, Legal Counsel;<br/>Sherri Sillitoe, Secretary

\*Pledge of Allegiance \*Roll Call

No Exparte Communication was expressed.

1. Approval of the meeting minutes

1.1. Approval of the February 09, 2016 and the March 08, 2016 meeting minutes

Chair Whaley declared the February 09, 2016 and the March 08, 2016 meeting minutes approved as corrected.

- 2. Consent Agenda
  - 2.1. LVH051914 Consideration and action on a request for final approval of Henry Flats Cluster Subdivision consisting of 12 lots, located at 4300 West 400 South; Travis Wallace Agent for PAANC LLC

**MOTION:** Commissioner Heslop moved to approve the consent agenda Item 2.1 LVH0S1914 subject to agency staff and agency requirements with the requirement of curb, gutter and sidewalk. Commissioner Parke seconded the motion. The motion carried by a unanimous vote with Commissioners Roger Heslop, Lance Greenwell, John Parke, and Chair Whaley all voting aye.

- 3. Administrative Items
  - 3.1. Engineering presentation and discussion on sewer expansion in Western Weber County Jared Andersen, Weber County Engineer

There is a lot of roadway construction going on in the western part of the county. As they have been discussing what they are going to do with the utilities, they discussed with the property owners whether they would like to upsize their utility lines now while the road is torn up. It is a good opportunity for all utilities because Weber County is already paying the dollars to take out the road and the material and paying to build the road back up. Every utility company is paying to upgrade their infrastructure; Rocky Mountain Power, Questar, Warren/West-Warren, Taylor-West Weber, Central Weber, etc.

As you know the County at times has responsibility for some sewer. They want to come up with a concept of possibilities if anything. Because it is outside of any sewer district boundary that currently exists. If a developer wanted to develop with a 25-lot subdivision, more than likely the county would take on the responsibility of sewer because there is no entity that controls that.

On 3500 W., most of the line is Central Weber and some parts are controlled by West Haven Sewer. There is a couple of parts that the county is responsible for and they are discussing with the other entities what could be done. 12<sup>th</sup> Street is a little bit different.

Commissioner Heslop stated that Central Weber Sewer comes along 4300 W. to the railroad tracks and then south of the railroad tracks to 4300 W. goes under the railroad tracks abd proceeds north on 4300 W. 900 S. and then goes east.

Jared Andersen stated that regarding the Central Weber Sewer line, if they come up from 4700 W to the east, they can either bore under the tracks at 4300 W. where it is on the south or they can gravity flow it all the way east to 4700 W. where it is on the north side. The way it looks, they can gravity flow it all the way to the main Hooper Irrigation crossing on 12<sup>th</sup> Street. The best thing to do is gravity flow the sewer. From that location at least to the River is an area that they need to look at. They will need to look at location, cost, and how many lift stations. They would need approximately five lift stations

just to get it from the river up to the Hooper Irrigation Crossing. The other thought process is to use a suck-sewer system which is pulling a sewer up to a location which is the least expensive option because of not using lifts and gravity flow. They started looking at this option and asked if they can put a system outside a future roadway, and install different sections and would it require putting laterals across those sections. They are trying to get on board with all the other utility companies by coming up with a masterplan and determining what they need to get ready for. The full extent of the process is to look at the options all the way to the industrial park. In trying to look at responsible growth and what they can do right now and how they would make it work. He believes the least expensive option would be to at least install laterals at locations as they go down so they won't have to come back and dig up the road in four or five years.

He wanted to run this by the Planning Commission now. He has spoken with residents in the western part of the county for the past three years and has heard both negative and positive comments. He believes that responsible growth is to be efficient with their monies and evaluate this to understand what they can do. Right now the construction on 12<sup>th</sup> Street would be from 4700 W. to the river. The next phases would be anywhere from two to four years from now and they are planning on getting the rest of the funding from WACOG or other funding mechanisms.

Commissioner Heslop indicated that most of the existing lots are on septic systems. He has heard many times that if the Health Department wanted to force the sewer system through, all they would have to do is show up on a cold morning and look for all the steam that is coming from the drain ditches. As they are tearing up 1150 5. between 4700 S. to the river, he is sure there are houses whose waste is coming out of the septic tank and draining into the drainage ditches. He suspects that that might be part of the opposition the county is facing because all of a sudden this has been found out that the excess water is flowing out of the septic tanks. For the people living along the 1150 S. and 4700 S. to the river, the road construction is a mess. He cannot imagine that those same home owners would want to repeat the same process in two to four years to build the sewer. The question comes back to the financing. If the sewer comes in, do they connect immediately to the main sewer trunk line on 4300 or 4300 W. Would they be required to hook to that sewer immediately or would they stub in for when it becomes active? He personally believes they should do it when the road is torn up.

Jared Andersen indicated that he agrees with Commissioner Heslop but he understands the concerns and feelings of those in opposition due do what they would have to face and what costs could be involved to change.

Commissioner Parke and Greenwell indicated that they agree with Commissioner Heslop.

Chair Whaley indicated that oftentimes the most resistance comes with those with a lot of frontage. He suspects the comments Commissioner Heslop referred to, the county will be hearing about from concerned residents.

Jared Andersen indicated that the next step would be to say that it feels like it is a good thought to look at and then figure out what they need to do going forward, what steps they can take, and look at any different funding options. They have already had a meeting with Lance Wood of Central Weber regarding what sewer he could take in from the west and he sounded positive at least on the upper section from 4700 W. to the river. They are under construction at this point, and it would need to be something they would have to get moving along with any discussion or plans. They would like to look at running the main line in the road shoulder so they wouldn't have to dig up the main road.

## 3.2. LVM031016 Consideration and action on an administrative application, for final approval of McLean Subdivision, 1 lot, located at approximately 771 South 4100 West; Susan McLean, Applicant

Jim Gentry presented a report and indicated that the property is an eight-acre agricultural parcel with a 1.65 acre lot being divided off and the remaining parcel will remain in agricultural. There is approximately 280 ft. of frontage. The subdivision meets the area and lot width requirements of this Zone. The subdivision is within walking distance (892 feet) of West Weber Elementary school. Curb, gutter, and sidewalk needs to be installed as part of this subdivision. The review by the school districts states that "only secondary students are eligible for bus service". The property is outside of any Agricultural Protection Areas.

Taylor-West Weber water gave preliminary approval with the condition that secondary water is provided by Hooper Irrigation and Environmental Health Department has approved the At-Grade septic system as means of waste water disposal. The Weber Fire district is requiring one new fire hydrant.

#### Western Weber Planning Commission

Jim Gentry read the Land Use Code 106-2-1(a) regarding block lengths where the street arrangement must be such as to cause no unnecessary hardship to owners of adjoining property when they plat their own land and seek to provide convenient access to it. Weber County Land Use Code 106-2-3 Blocks talks about areas of flat land where topography presents no development barriers, minor terminal streets or cul-de-sacs proposed in subdivisions shall have a maximum length of 650 feet to the beginning of the turnaround and block lengths shall at a maximum be 1,300 feet with a minimum block length of 500 feet. The lot is 510 feet to the intersection to the south and 1,700 feet to the intersection to the north. There is a 50 foot space between this subdivision and the next parcel to the north that a future road could utilize; however the County Engineering Division wants this space to be 66 feet wide for a future road. The Engineering Division also wants a utility easement along the frontage.

Staff recommends final approval of McLean Subdivision with 1 lot, subject to staff and agency requirements, with a recommendation concerning curb, gutter, and sidewalk including the requirements of the Weber County Engineering Division, requirements of Taylor West Weber Water which includes those from Hooper Irrigation, and the impact fees; the requirements of the Weber Fire District. All improvements need to be either installed or escrowed for prior to recording of the subdivision including curb, gutter, and sidewalk.

Commissioner Heslop asked if the curb, gutter and sidewalk could be escrowed when the subdivision is approved. Commissioner Parke asked if they defer the curb, gutter and sidewalk. Jim Gentry indicated that currently they do not have provisions for curb gutter and sidewalk escrows. Deferrals would put future owners on notice that at some point it could be required. Rick Grover indicated that at this point, typically it is wiser to put the responsibility on the developer rather than the home owners. Jim Gentry indicated that the applicant is requesting a deferral.

**MOTION:** Commissioner Greenwell moved to recommend final approval of LVM0106 subject to staff and agency recommendations subject to the existing conditions of approval that are set forth by the County staff and agency recommendations and subject to having the appropriate curb, gutter and sidewalk. Commissioner Heslop seconded the motion. A vote was taken and Chair Whaley indicated that the motion carried with a unanimous vote with Commissioners Roger Heslop, Lance Greenwell, John Parke and Chair Whaley voting aye. Motion Carried (4-0).

- 4. Public Comment for Items not on the Agenda None
- 5. Remarks from Planning Commissioners

Commissioner Parke indicated that it is Jim Gentry's last meeting and the Western Weber Planning Commissioner wishes him well.

6. Planning Director Report

On Tuesday, May 24<sup>th</sup> they will have a special training for the Planning Commissioners and 4:00 p.m. for the Board of Adjustment members. There were some concerns expressed by other members regarding that this is the date for Weber High's Graduation. Commissioner Whaley indicated that he may be out of town that day. The other members present indicated that May 24, 2016 was fine for the proposed training.

- Remarks from Legal Counsel Courlan Erickson indicated he was filling in for Chris Crockett and had nothing to add to tonight's meeting.
- 8. Adjourn

There being no further business, the meeting was adjourned at 6:33 p.m.

Respectfully Submitted,

Sherri Sillitoe, Secretary Weber County Planning Commission Minutes of the Western Weber County Planning Commission held on May 10, 2016, in the Weber County Commission Break out Room, 2380 Washington Blvd., Ogden UT

Mark Whaley, Chairman; Jannette Borklund, Wayne Andreotti, Lance Greenwell, Roger Heslop, John Parke
Michael Slater
Rick Grover, Planning Director; Scott Mendoza, Assistant Planning Director; Ronda Kippen, Principal
Planner; Ben Hatfield, Planner; Chris Crockett, Legal Counsel; Sherri Sillitoe, Secretary

\*Pledge of Allegiance

\*Roll Call

Commissioner Borklund stated that she told her neighbor the zone of the property of the agenda item in her area, and that it could not have tiny lots. She also told him the time and place of the meeting. She then told him that she couldn't say anything else about the meeting. The members decided that she could participate in the meeting.

#### 1. Administrative Items

1.1. CUP 2016-08 Consideration and action for a conditional use permit for an Agri-Tourism operation identified at the Cold Springs Trout Farm located at 2284 Fruitland Drive, in the Agriculture (A-1) Zone. (Neal Ward and Carrie L. Barker, Applicants; Tarah Michelle Barker, Authorized Representative)

Rick Grover indicated that notice was not required and was done as a courtesy.

Ronda Kippen indicated that this property is located in a little island in the North Ogden area but it is under Weber County's jurisdiction. It has been in existence since the early 1900's. It was purchased in 1907 by Lyman Barker. In 1924 they started implementing some of the cement ponds for the trout. Tarah Barker is the authorized agent on this application. This is a pre-existing operation that pre-dated the zoning ordinances so there was no reason for them to come to the county requesting approval of a trout farm. They have now come forward requesting some of the uses that are in the new Agri-Tourism Ordinance. Staff told them to dream big and think about the uses that they would like to have there in the future. It is a well-loved destination throughout Northern Utah; it is family-owned, family-loved and family-friendly. They would like to convert one of the existing structures into a gift shop.

The proposed use will be beneficial to the owner as well as the residents of Weber County by allowing the owner to continue utilizing the farm as it has been historically operated and allow for some additional commercial and education abilities to be implemented while promoting the preservation of agricultural property. They may produce vegetables in their garden to sell as well in the future. Last year they obtained a land use permit for a greenhouse and they grow vegetables, fruits, etc. They want to have a harvest market stand and sell their vegetables, etc. that they yield on site. They have a conditional use for a corn maze as well.

There is a single family dwelling and agriculture related buildings and areas. Their immediate plans are to transition the existing building to a gift shop, sell produce, tear down two structures and construct a conference center type building that could be used for educational classes and tours, food concessions, gift shop and other uses. It is an allowed use in the Agri-Tourism Zone. They have adequate paved parking. There is a single family dwelling on site as well as some outbuildings that are agriculturally related. They are promoting a working farm on this site.

The hours of operation are The Cold Water Trout Farm is open to the public during the hours of 9:00 am - 8:00 pm Monday through Saturday and there is not a proposed changed to the hours of use at the facility. The applicants will have to come into the office for a special permit when they would like to have a corn maze there.

The applicants will have to comply with the following:

The Planning Division recommends approval of file# CUP 2016-08, a conditional use permit for an agri-tourism operation identified as the Cold Water Trout Farm located at 2284 Fruitland Drive North Ogden, UT. This recommendation for approval is subject to all review agency requirements and with the following conditions:

A farm stay and a commercial development agreement will be executed and recorded prior to any construction of any structure intended for the purpose of accommodating non-agricultural uses, requirements of the Weber County Building Inspection Division, requirements and recommendations of the Weber Fire District, requirements of the Weber County Engineering Division, and requirements of the Weber County Health Department.

This recommendation is based on the following findings:

- 1. The proposed use conforms to the West Central Weber County.
- 2. The proposed use will protect and preserve agricultural property in Weber County.
- 3. The proposed use, if conditions are imposed, will not be detrimental to the public health, safety, or welfare.
- 4. The proposed use, if conditions are imposed, will comply with applicable County ordinances.

5. The proposed use will not deteriorate the environment of the general area so as to negatively impact surrounding properties and uses.

Commissioner Borklund asked if they want to identify the items as being approved in any motion. Ronda Kippen stated that in a motion they could list that they are approving the Agri-Tourism operations as identified in the staff report would be sufficient. Every single use with the exception of the Farm Open air market is recorded within the small farm stay development agreement. They do not need to do all the uses now, but the development agreement will include the uses and will be recorded against all three parcels.

Neal Barker indicated that staff gave a fantastic presentation and he appreciates the county for their support. Commissioner Andreotti indicated that he appreciates that Mr. Barker has decided to participate in the Agri-Tourism Ordinance and agri-tourism in Weber County. Mr. Barker indicated that he believes agri-tourism this is the key to keeping them around for many years to come.

Commissioner Heslop indicated that at the National APA Conference he saw a similar operation as this proposal and he could give him some additional ideas.

MOTION: Commissioner Heslop moved to approve the CUP 2016-08. Consideration and action for a conditional use permit for an Agri-Tourism operation identified at the Cold Springs Trout Farm located at 2284 Fruitland Drive, in the Agriculture (A-1) Zone. (Neal Ward and Carrie L. Barker, Applicants; Tarah Michelle Barker, Authorized Representative) subject to the staff report recommendations based on the findings listed in the staff report. Commissioner Borklund seconded the motion. The Motion carried by a unanimous vote with Commissioners Borklund, Andreotti, Greenwell, Heslop, Parke and Chair Whaley voting aye.

# 1.1. SPE 2016-02: Discussion and action on a conceptual sketch plan endorsement request for the Favero's Legacy Cluster Subdivision located at 3790 W. 2200 S in the Agricultural (A-1) Zone (Robert Favero, Applicant)

Ronda Kippen indicated that this was part of a larger sketch plan, but he has had to separate it and do a separate cluster. This cluster did not meet the previously approved cluster, and staff felt that they should bring it back for a sketch plan endorsement. The applicant has requested bonus density based on the following qualifying criteria: 10% bonus for meeting the purpose and intent of the cluster subdivision and a 15% bonus density based upon adding 0.055 acres of open space to be used as a community garden for an overall 25% bonus density.

Ronda Kippen stated that they have four open space parcels which are all over an acre so that they can be individually owned. There is a 25 x 95 community garden and it would need to be owned by the Home Owners Association and have CC&R's. Mr. Favero does not want an HOA so he will need an open space management plan for that community garden easement. The lot width and sizes all meet the design standards listed in the Cluster Subdivision Ordinance. One lot can be below the 15,000 sq. ft. because it is adjacent from agriculture property that has not been developed.

Commissioner Borklund asked if the size of the community garden would be adequate. Ronda Kippen indicated that the code states that the county may at its discretion allow a 15% bonus density for a community garden. It does not list any sizes of how big the garden has to be. Commissioner Borklund stated that if it is too big it could go to weeds unless properly managed and if it is too small, nobody would use it; they would have to find a balance. Ronda Kippen indicated that there has to be a good open space management plan.

Robert Favero indicated that some of the original plan might go forward in the future. He had purchased this property in order to have access to 2200 S. and he has held on to it, but now he wants to sell it. The original subject was a cluster subdivision and it had a one acre community garden as part of it. They want to keep the cluster idea and have the garden. They can enlarge the garden in the future. They plan to put grow boxes there so it just won't be open space. There is secondary water there and it will be easier to take care of. Almost half of the eight acres is in open space. If there are easements needed, they could provide them. The idea was that they could sell the lots at an affordable price and someone may want the extra ground.

**MOTION:** Commissioner Borklund moved to give conceptual approval based on the standards that it meets the cluster subdivision standards of the ordinance. Commissioner Greenwell seconded the motion. The Motion carried by a unanimous vote with Commissioners Borklund, Andreotti, Greenwell, Heslop, Parke and Chair Whaley voting aye. Motion Carried (6-0).

1.2. AE 2016-01: Consideration and action on an access exception to use a private right-of-way (ROW) as the primary access for 6 Lots in the Hidden Oaks Subdivision located at a 6260 S 2125 E (Jared Circle) in the Residential Estates (RE-15) Zone (Somerset Land LLC, Applicant; Sharon Clark, Authorized Representative)

Ben Hatfield indicated that the property is located in the Residential Estates RE-15 Zone and the site is 3.28 acres. The RE-15 Zone requires single family dwellings to be on lots no less than 15,000 square feet. The applicant has provided a narrative and concepts of the project.

The location of the proposed private R.O.W. is from a 29 foot gap that was left available for access when the subdivision creating Jared Circle was platted in 1992. In 2004, this property received a variance from the Board of Adjustment to allow for a right of way (R.O.W.) access for two lots. This approval was based the unique boundary conditions of the property which is surrounded by developed lots with only a 25 foot gap and frontage on Highway 89. As Highway 89 is a divided state highway, Utah Department of Transportation would not grant access due to traffic safety concerns. The approval was conditioned upon the private R.O.W. meeting at the time of subdivision, the design standards that were in place at the time.

Lot 1R in the Hidden Oaks Subdivision was a restricted lot and Utah Geological Survey cited that there were some steep slopes and soils but the review of the house plans would provide the support for one residence at the bottom where it was not so steep. A Geologic and Geotechnical report was submitted and reviewed by the county and the Utah Geologic Survey citing some concerns as to the slope and soils, but that with a review of the house plans the property would support one residence.

At the time of subdivision, the private R.O.W. will be required to meet:

- 1. All design, safety, and lot/parcel standards listed in Title 108 Chapter 7 Section 29 of the Weber County Land Use Code.
- 2. All recommendations made by applicable review agencies, approved plans, and reports.
- 3. A maintenance plan for the private R.O.W. must be put in place.

In addition to these standards, the request is required to comply with the criteria and conditions listed in Section 31, which is specific to access by a private R.O.W. These standards are listed below under "Summary of Planning Division Considerations." Approval of the private R.O.W. as the primary access does not act as approval of the future consideration of a subdivision plat.

Staff's recommendation is based on a number of conditions of approval. Prior to final subdivision approval, the applicants must also sign an agreement to pay a proportionate amount of the costs associated with developing a street if, at any time in the future, the County deems it necessary to have the landowner replace the private R.O.W. with a street that would serve as a required access to additional lots.

Meeting applicable review agency requirements from the Weber County Engineering Division, A Natural Hazards and Hillside Review approval, installation of the proposed improvements, requirements of the Weber Fire District, completing and recording the subdivision, meeting the design criteria listed in Sec. 108-7-29 Access Easement Standards, and a cost and maintenance plan put in place for the approved care of private R.O.W.

Staff recommends approval of a private R.O.W. as the primary access for the proposed six lots. The recommendation is subject to the applicant meeting the conditions of approval in this staff report and any other conditions required by the Planning Commission. This recommendation is based on the following findings:

- This property has boundary conditions which limits typical access requirements in a unique way and is undesirable as the other property surrounding the site has been developed and access from Highway 89 is not approved from UDOT. It is therefore impractical for a full street or cul-de-sac to be required at this location.
- Due to the unique topography, steepness, and width construction of a county road it is impractical to provide a county road.

Commissioner Borklund asked if they should add that there will be no parking along the length of the right of way and that staff cannot approve the six lots. Ben Hatfield indicated that he believes that would be wise. Typically access exceptions can be approved administratively and approved by the Administrative staff however as this access exception is for consideration of six lots and has hillside review concerns, it was determined that the Planning Commission hear the proposal. It should be moved and stated that the Planning Commission reviewed the subdivision and the proposed improvements and feel that they can be adequately addressed. The design may not be a final improvement plan but at least a feasible design.

The members asked Ben Hatfield to review the applicable review criteria for the benefit of the audience. Mr. Hatfield reviewed the criteria at this time and indicated that the criteria are that they evaluate the lot that is being proposed, that the agriculture use is the main use, and they would continue to support agricultural as the main use of the property.

Commissioner Heslop asked if the ROW had been approved with prior plans that have come in, and Ben Hatfield replied yes and referred to the 2005 prior design. Those improvements did not go in. The width of the ROW was 29 ft. at the entrance which tapers down to 25 ft.

Donald Fulton indicated that he is partners with Sharon Jean-Clarke and they represent Somerset Lands which are the owners of record. Mr. Fulton indicated that he resides in Sandy.

Sarah Wikern, 6261 S 2125 E, stated that she lives across the street from the property in question. She has a Master's Degree in Civil Engineering and is a licensed Engineer in the State of California. Her concerns are the boundary conditions. The lots in her area are between 1/3 acres and ½ acre and the buildable part is very steep. There is at the very least one acre that is buildable. She doesn't believe that it is reasonable or feasible to sell the property with the feasibility of having six buildable lots.

Kimberly Filler, 6266 S 2125 E, stated her home is adjacent to the passageway. Her biggest concern is that she moved into a cul-de-sac. She knew that the land behind them would be one building lot. By approving this, it would open it up to be a roadway with many cars and trips being made over that road way per day. Because her property is right up against that, she is concerned that it would encroach upon her property with the fire hydrant and she is concerned with the safety and privacy. She is concerned with development of that level.

Larry Garrett, 6254 S 2125 E, indicated that there are many children in the area along the road and cul-de-sac. The property is very steep. This is the third meeting he has been to with people trying to build on this property. He believes it is impractical to put six houses there.

Mike McGron Miller, who owns the lot on the east corner just above the applicant's property, stated that his concern is that the people on the east side of the ravine area; if land were to be taken away on that side of the ravine, he would be concerned that they would lose more land up above. They already have to replace soil that washes away from his land up above. If they have to cut the steep hill back even further, it would pose more problems to his land up on top of the ravine.

Brad Cutler, 6266 S 2125 E, stated that he pulled up a map and indicated that this property is in a landslide zone. He would be concerned that people would want to build a single-family home in a landslide zone.

Kevin Black, 6280 S 2125 E, stated that he lives two houses down from the easement. His concern is that to retain the hillside, they would have to dig out the hillside and then retain that. The costs involved in and to secure the hillside would be astronomical. He believes it goes down to 20-25 ft. The current road is more than the 25 ft. easement. Their children sled down the slope and it is a concern. The hillside, the slope and the road on the other side would have to be retained and maintained. It is a great concern to him. In fairness to the property owner, they would have to put in tremendous cost to retain and maintain the area.

Chair Whaley said that the role of the Planning Commission, generally speaking, is to follow their staff recommendations. This application is for an access exception. It is not a final approval of a subdivision.

Chris Crockett indicated that the question presented tonight is really quite narrow. Given the topography of the property, whatever happens tonight, the land will still have to go through the subdivision process, a hillside review, etc.

Chair Whaley stated as this proceeds, the process will continue to move forward when the subdivision process starts.

Kimberly Filler sated that it was her understanding that the ROW was approved for one dwelling and tonight's decision is to allow more than one dwelling in the ROW. They all believe that right now they have the opportunity to stop what has happened for years. They are trying to show that it is not reasonable to allow more than one dwelling. She believes they are talking about the narrow scope. They all bought their homes when this private road had access for only one dwelling. To change that, she believes it is not reasonable to look at the property and envision more than one dwelling. She believes stopping it where it starts would be reasonable. There are concerns that it is not feasible.

Commissioner Greenwell indicated that it is yet to be determined whether it is right and feasible. He believes that what they are doing tonight would send it to the County Engineer to determine that. Commissioner Andreotti indicated that he believes it needs to follow the zoning rules and a subdivision application is not on the agenda tonight. The Planning Commission needs to follow the zoning rules and follow their process.

Brad Cutler asked if it would be feasible for someone to travel down the road where there is only one outlet. The roadway width is too narrow and is not wide enough to accommodate traffic to and from six homes. Chris Crockett believes that these are legitimate questions and he believes that information will come out after the experts review the information. As to whether to approve it tonight or not, it would have to be within the limits of the County Ordinance statute.

Commissioner Parke indicated that the approval isn't tied to a number. Right now, it is for access to one lot.

Rick Grover stated that this item could have been approved administratively because they wanted to notify the residents and make sure that they were aware. He has visited the site and also has concerns, but anyone has the right to make application and go through the process under the zoning rules to prove that the property can be developed with six lots. When the process gets to the subdivision level, the neighbors would all be notified. The access exception does not give any approval to any number of lots. They have approval for one restricted lot. UDOT will not give another access to that area, but there are more hoops that would have to be gone through, before it gets to subdivision approval.

Larry Garret asked if there is not access granted to the lot there. Rick Grover indicated that there is already access approved for one lot. If he meets the requirements, they can put one home there on a restricted lot. Ronda Kippen indicated that initially, it was approved for one flag lot. The code allows for the access exception with strict criteria. If it is fewer than five lots, the road has to be so much width. This is the first time they have been approved for an access exception.

Commissioner Borklund asked if the fire department had looked at it for being more than one lot. Ben Hatfield indicated that they were aware of the project and indicated that it would have to meet their standards, but they haven't seen an actual design to review yet. They would be concerned with the steepness, the clearance, the width of the road, the weight capacity, the length etc.

Commissioner Parke asked why if the exception for the right of way and were to be granted and not be possible to do and because if they can't meet the requirements? Commissioner Borklund stated because they would be giving false security to the owners saying that it could be developed into more than one lot when maybe it can't; they don't know that, they do not have enough information to say if it meets the standards. Chris Crockett indicated that they do not have the technical information right now to say what could happen right there.

Commissioner Borklund indicated that the ordinance they are looking at tonight would be based on whether it is impossible or impractical to extend any other access to that property. Chris Crockett read LUC 108-7-31 as shown in the meeting packets at this time.

Kimberly Filler stated that her question would be is it practical or feasible to allow more than one homes worth of traffic into a cul-de-sac. Is there a way to make their motion so that it is contingent upon approving the questions that they have so that it is not falsely presented (an access that isn't really accessible)? Chair Whaley stated that this is a valid comment and they had the discussion earlier regarding parking. He wants to make sure they are focusing on what is on the table before them.

Ronda Kippen stated that access exceptions expire eighteen months after the date of approval of the Land Use authority. Land Use Code Title 108-7-29.4 states that the subdivision would have to be completed and recorded 18 months from the date of approval of the exception. Commissioner Heslop asked if that would mean the prior right of way has expired, and Ms. Kippen replied, no because it is recorded and platted. Chris Crockett stated that there is a difference between a right of way and an access exception.

Commissioner Borklund looked at the subdivision ordinance regarding street grades. Does the 15% percent requirement for a street apply to this? Ben Hatfield replied no; it is considered a private driveway. There is not a standard as far as the grade of a driveway. In this case, the access would have to be less than 15%. As Lot 1 is platted, they would have water and sewer provided from Uintah Highlands Water and Sewer District from the cul-de-sac and it would be a lift station that would pump the water up to the service main.

Commissioner Borklund asked staff to clarify that the applicants are asking for the width, 25% of the whole length of what they are asking for. Ben Hatfield replied yes. Commissioner Borklund also asked staff to clarify that one of the conditions they are asking for is that there be no parking along the right of way. She believes this should be part of a motion.

Commissioner Parke asked staff to clarify that based on what they have heard tonight, there is no way they could deny the access exception tonight. Ben Hatfield indicated that the staff report lists all the criteria and standards that the application would have to meet.

Commissioner Borklund stated that the narrowness and the steepness is still a concern to her. Commissioner Parke agreed. She believes they can't say that they can have approval for more than one lot knowing what the property looks like. Rick Grover stated that is why they have to rely on the professionals to show that and while they all look at it and wonders how it is going to work, they still have the ability to hire a professional to show how it can and to prove to them how it can. Commissioner Parke indicated that what they are saying whether it is six or 20 lots, that they don't know that the road that could be constructed in there would be adequate or if it would meet the county's requirements for a street.

Rick Grover indicated that that is what would be addressed at the time of subdivision approval.

Commissioner Borklund stated that if Rick Grover did not feel comfortable approving it, why shouldn't they have to be concerned? Rick Grover stated that he wanted the residents to be able to voice their concerns before it reached the subdivision level. He didn't want anything to happen behind closed doors and he wanted everything out in the open.

Chair Whaley indicated that this is a useful and productive public hearing for them to be able to see what the concerns are. He understands that the owner has the right to develop his property within the county regulations. This access exception is a stepping stone that the applicant has to pass in order to get all the other issues discussed during a subdivision approval process. Chris Crockett indicated that there will be questions that will have to be answered.

Larry Garrett indicated that in his common mind it seems like to him they are putting the cart before the horse. It seems like they are granting access without knowing that the access could be feasible or practical.

Brad Cutler asked the minimum width that a multi-lot subdivision area would need to have for safety concerns. Ben Hatfield indicated that the minimum ROW width is 16 ft. with a travel surface of 12 ft. Once you exceed 5 lots or exceed a certain distance from the roadway, the Fire Marshal states that it be 20 ft. Ronda Kippen referred to LUC Title 108-7-29.1b and c. Ben Hatfield stated that a 50 ft. ROW would probably have 24 ft. width of asphalt and includes curb, gutter and sidewalk and sometimes it has been reduced to 20 ft. in PRUD's. This is more like a driveway that would serve five or more residences.

Chris Crockett stated that the ability to ask the question for subdivision preliminary approval, the code provides the criteria that a ROW has to meet. It could be a big financial burden to a developer to go through the entire subdivision process only to find out that it could not have adequate access. This is a question or way that can be answered before it gets to the subdivision level. Ronda Kippen replied that Mr. Crockett is correct. The subdivision code requires that they answer certain criteria and questions.

Donald Fulton stated that they are only asking for an access exception to the property. It doesn't entitle them to develop it or any subdivisions. In order to develop into a subdivision, it would have to meet the subdivision code and be reviewed by the reviewing agencies.

Commissioner Parke stated that it is their duty to support the code, not the staff's recommendation. Based on the criteria presented, they have to approve the access exception today even though it is contrary to what they want to see done. There really isn't a question to debate. Chair Whaley indicated that they want the community to be aware of the process which is why it was placed on the agenda. Commissioner Borklund stated that they don't know how steep the property is and how steep the road is going to be. Commissioner Heslop stated that the question is can they get to the property to determine that.

5arah Wikern asked if there was anything in the code that prevents people from changing the intended use of the property or that protects the neighbors from so much traffic going through a cul-de-sac. Rick Grover indicated that if there are permitted uses in the zone in which a property is located and someone wanted to have a different use, then the new use as a permitted use in the zone in which their property is located it would be approved. Codes change all the time, so it would depend on the code regulations at the time of application.

Commissioner Borklund stated that they would have to meet setback requirements also, and she believes it will be tricky. If they approve the item the way it is listed on the agenda, it is confusing. Sarah Wikern stated that she believes they the reason they are asking for six lots is that they are asking for 29 feet which puts them in the code requirement of if it is over five lots it would require 20 ft. road width. In answer to Chair Whaley who asked that staff clarify the code regarding road width improvements, Ronda Kippen stated that with fewer than five lots, 16 ft. is allowed and for over five lots, 20 ft. is required. There is no limit on the number of lots.

Kimberly Filler stated that it does not make sense to her that the planning commission has to approve an access exception. If you are asking for an exception, it is an exception; the rules have already been established. She appreciates the notice given so that they could be here. She feels like there was a reason why the planning commission wanted to hear their concerns, but she feels like they don't want to approve this so she is unclear as to why they have to approve it. Chris Crockett indicated that they have to answer the question based upon how it was asked; why their concerns exceed the narrow scope of that question. Commissioner Borklund indicated that they do not have to say it is for more than one lot. Chris Crockett indicated that legally they are not approving six lots no matter what they do; that question has not been asked of them.

**MOTION:** Commissioner Borklund moved that they recommend approval for the private right of way for primary access for a one lot subdivision based upon the findings that there is a typical access requirement that only allows a unique way and is undesirable for other access to the property and limited to one lot with the criteria 1b and 2b. Commissioner Parke seconded the motion.

### DISCUSSION:

Chair Whaley asked Legal Counsel if he had a question. Chris Crockett said the purpose for the question and for this application is so that they can ask the question to subdivide the property of six lots. They already have the access for one lot. He believed that it's platted that was approved, so they wouldn't be approving the subdivision; it's already there. Commissioner Parke said they would be approving a wider access, is that's what they are doing with one lot? Mr. Crockett said they have to ask if their motion is going to allow the applicant to proceed forward and present a subdivision application. Commissioner Borklund said that was her motion. Chair Whaley asked Commissioner Borklund to restate her motion with offset that she was going to talk about parking or does she want to add that in there or just leave it out. Commissioner Borklund replied yes.

**MOTION:** Commissioner Borklund moved that they recommend approval for the private right of way for primary access based on the recommendations that it meet all the recommendations of the County Engineering Department, Hillside Review approvals, installation of the required improvements, requirements of the Fire District, and that no parking would be allowed along the access road.

Chair Whaley asked the commissioners if they had a clear understanding of what the motion is. Commissioner Andreotti said that he had a clear understanding as well as Commissioners Heslop and Greenwell.

Chris Crockett indicated that they are not approving a one-lot subdivision; that is already platted.

Vote: A vote was taken with Commissioners Borklund, Andreotti, Greenwell, Parke, and Chair Whaley voting aye. Motion Carried (6-0).

#### 2. Public Comment for Items not on the Agenda

Brent Fowers, 4393 W. 4300 S., Ogden UT 84401, stated that he has come before this Planning Commission. They do not have any parks in the area. They would like to set up a Park District in that area and then instead of having smaller parks there, then they could turn any money received into land that they could set aside for a larger park.

Rick Grover indicated that they are meeting with the West Warren Park District to begin discussions regarding increasing their Park District in the near future. They are starting a grass roots dialogue as has happened in the past but died or fizzled. Kathy Verniew stated that she and Brent Fowers would also like to attend the park district expansion meetings.

Brent Fowers asked if it was legal to transfer those rights from a smaller open space park area in a cluster subdivision to the district. Rick Grover stated that they first start with the General Plan to determine if and where they would like parks. Right now, they don't have a park district to implement that. They do have private businesses that donated to the West Warren Park District.

Commissioner Heslop indicated that in the General Plan, the only area designated for a park is in the West Weber, West Warren, Taylor area that is behind West Weber Elementary School.

Rick Grover indicated that t RMHP Plan will start the discussion but it will not be part of the General Plan yet. There have not been funds set aside yet for the General Plan update. Chair Whaley asked that they be apprised of any park expansion or designation meetings.

Commissioner Parke asked to be excused at 6:56 p.m.

### 1.4. DISCUSSION: PRUD Code related to Bonus Density – Scott Mendoza

Today the county may approve up to a 50% bonus. In the county's PRUD Code, Title 108 Chapter 5, it is rare that developers would present a PRUD to them because there is a lot of upfront cost. For a PRUD, an applicant would have to come before the Planning Commission with landscape plans, elevations for the housing types, the uses that are in a PRUD, open space, materials, Architectural styles, and colors, etc. The trade-off is a relaxation of the rules. The Planning Commission would be able to get a feel of the type of community the proposal would bring. The question he would like to ask tonight is if they would ever consider taking what is in the PRUD Code (a 10% bonus max potential) and increasing that bonus potential. If they like the development pattern in the PRUD, the 10% bonus is not much of an incentive. If the preservation that it can provide, whether it is agriculture or just open space, the PRUD Code can also offer these types of things, but 10% is not much of an incentive. A PRUD development is more detailed.

In answer to a question by Chair Whaley, Mr. Mendoza stated that a cluster subdivision requires a financial guarantee. The conditional use permit acts like a conceptual approval. Brad Blanche is here tonight and staff sat down with him a little while ago and discussed this issue. He has a piece of property in the western county area that he would like to develop. Mr. Mendoza indicated that the minimum width open space in the cluster subdivision code is 75 ft. and requires that there be at least 3 lots in a cluster but no more than 20 lots. Mr. Blanche's PRUD concept shows larger, less chopped up, open spaces. The open spaces are larger and more useable.

Brad Blanche stated that when they looked at the cluster ordinance, they found it was restrictive and they were trying to figure out how they would get 20 lots surrounded by 75 ft. of open space and they also wondered what they would do with that space. They wanted to honor the agricultural environment in the area that this property is in, but with 75 ft. swathes, it almost makes it impossible to utilize the ground for the cluster concept. He believes the PRUD concept would allow them to provide a development with useful open space such as a park and it wouldn't be as restrictive as the cluster subdivision requirements. They drew up a proposal of what they wanted the PRUD to look like as far as large open space parcels that allows useful open space. Their design is designed with 50% open space bonus density. Mr. Blanche indicated that the project would not be financially viable using only a 10% open space bonus density and he believes it would not be a design that anyone would want.

Commissioner Heslop visited the agri-topia area at the National Conference. There were (450 units, 2 restaurants, a retirement home and a private school, etc. in that development). He was excited about this project and revisited the area after the conference was over. He understood that they asked for an exemption so that they could set up some things within their community. Their property line starts at the curb, but the front yards are managed by a HOA so there is uniform maintenance. The sidewalks are on private property but have public access. He was very impressed. There was a range and variety of houses and sizes of house. There were no fences around the houses except around a swimming pool. Every house has to have a front porch with tree lined streets. Initially, when they started selling them they were in a housing boom, and then they went through a bust; now they are getting to where they have the people who want to be there. They are working on a community garden area where they have the year-round capability of growing vegetables with the climate that is there. He was impressed that the chickens ran through the orchards. They are going to put in a bunch of apartments and it is literally a lifetime community.

Scott Mendoza stated that a lot of their conversation was what lots could be marketed and it was really about aging in place. Instead of coming in to be exempt from the county's rules, they have the ability to come in as a PRUD and based on the concept of the information submitted to them, they have the ability to relax the rules and allow them to build something similar to agri-topia.

Brad Blanche stated that his concept would not take in anywhere near the density of what agri-topia has. He would love to do something a little different that is more agriculture oriented than what the current PRUD Ordinance allows them to do. The 50% bonus gets them closer, but today they couldn't do it. Scott Mendoza stated that they even spoke about neighborhood-scale commercial.

Ronda Kippen stated that the PRUD plans could be anywhere from the starter homes to the midlife home to the end of life residence.

Brad Blanche stated that on his property there is a significant amount of water available but they are trying to think environmentally also so that excess water could be used elsewhere.

Commissioner Andreotti indicated that in his mind he doesn't believe that the cluster subdivision is sustainable. He believes that there should be a certain element in landscaping to make it pleasing. He envisions a place where people want to come and that's the thing he likes about the PRUD because in his mind it is more sustainable especially if it has other amenities, but it is more expensive. He would like to see Mr. Blanche bring in the amenities and things that people would like to see there and be able to stay in the area no matter what the stage of life someone is in.

Commissioner Borklud stated that you could have a clubhouse, pools, etc. or other things as an amenity. Commissioner Andreotti stated that to him, they want to have places where people want to be to see if there is some way of making it a place where people want to gather.

Scott Mendoza stated that they have had CSA's, Community supported agriculture. There is a new thing called a, DSA Density Supported Agriculture. In a PRUD, they can create plaza areas where people could gather. If staff has the Planning Commission's blessing, they could move forward further addressing this.

Commissioner Heslop indicated that personally, he believes they need to proceed with it. He believes people want community and feel like they belong. In the Agritopia project in Arizona, they produce more than the local people can purchase. They contribute harvested vegetables, and other product to community baskets. It was an interesting concept to witness on the 150-acre development. The majority of the housing has secondary housing or businesses but they will not allow an automotive repair shop due to the noise generated. Almost any other business other than an automotive repair shop is allowed.

Commissioner Borklund stated that she would agree they should move forward exploring the idea.

Commissioner Greenwell asked if a coffee shop or bakery would be allowed on the open space or would they have to come in and take up one of the lots. Scott Mendoza indicated that they would be on parcels within the subdivision. They may even have work space below and living space above.

Ronda Kippen indicated that for the smaller PRUD's, it would not fit, but for Mr. Blanche's concept it would.

Brad Blanche indicated that with an organic farm, you wouldn't want a lot of property, probably a 10-12 acre parcel of property. The goal would be to have 10-30 acres of organic farming in his concept. It is a unique property but there are no old farm houses there; however, with the work that has been done on the Weber River, he believes it makes it a unique and a good candidate for this type of development. There is a large property where they don't have water. He would like to maximize the water available and be environmentally friendly. His brother in law is a landscape architect in Oregon and has turned him onto some ideas he would like to explore. If they got 50% bonus in clustering, what is wrong with having 50% in PRUD's? The Commissioners expressed that they believe they should start at 50%. They should see what qualifies for greenbelt and that may alleviate the smaller lots from this. Mr. Blanche indicated that he would like to begin dialogue with them.

Commissioner Heslop stated that in Agri-topia, they plant alfalfa under their citrus trees and they have a portable chicken coop so that the manure doesn't concentrate in one area. They move their water containers as well. Ronda Kippen stated that that would probably keep the bugs down and control the use of pesticides.

Brad Blanche indicated that there is the concept in Ohio (a 300 acre development) that is becoming a trendy thing right now.

#### 3. Remarks from Planning Commissioners

Commissioner Heslop expressed his thanks for the county sending him to the National Conference. There were several work sessions that were excellent. He could present his findings at a meeting where there is a small agenda.

#### 4. Planning Director Report

On the May 24<sup>th</sup>, there is a combined Training Session with Brent Bateman to begin at 5:00 p.m.

Rick Grover stated that he appreciated the members working with staff and being willing to meet in the break-out room with the County Commission meeting being held in the County Commission Chambers.

#### 5. Remarks from Legal Counsel - None

#### 6. Adjourn

There being no further business, the meeting was adjourned.

Respectfully Submitted,

Sherri Sillitoe, Secretary Weber County Planning Commission



## **Staff Report to the Western Weber Planning Commission**

Weber County Planning Division

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Application Information Application Request:	Consideration and recommendation on a proposal to amend the following sections of the Weber County Land Use Code: Definitions (§101-1-7), General Provisions (§102-1), Natural Hazards Overlay Districts (§104-27), Supplementary and Qualifying Regulations (§108-7) and Hillside Development Review Procedures and Standards (§108-14) to clarify that the Planning Commission is not the only land use authority over projects with natural hazards, and to provide clarity, remove redundancies, and include process steps and appeal provisions for natural hazards
Agenda Date: Staff Report Date: Applicant: File Number:	Tuesday, June 14, 2016 Monday, June 9, 2016 Weber County Planning Division ZTA 2016-01
Staff Information Report Presenter:	Charlie Ewert cewert@co.weber.ut.us (801) 399-8763 RG

#### Applicable Ordinances

§101-1-7: Definitions
§102-1: General Provisions
§104-27: Natural Hazards Overlay Districts
§108-7: Supplementary and Qualifying Regulations
§108-14: Hillside Development Review Procedures and Standards
Legislative Decisions

Decision on this item is a legislative action. When the Planning Commission is acting on a legislative item it is acting as a recommending body to the County Commission and has wide discretion. Examples of legislative actions are general plan, zoning map, and land use code amendments. Typically, the criterion for providing a recommendation on a legislative matter suggests a review for compatibility with the general plan and existing ordinances.

### Summary and Background

Weber County has many various natural hazards. The natural hazards overlay ordinance<sup>1</sup> was created decades ago in an attempt to address mitigation measures for building on potentially hazardous sites. Hazard study areas are identified based on the best hazards mapping information available for a given site.<sup>2</sup> These maps give a point of reference for the County to gauge whether additional studies are needed prior to permitting new development. After site evaluation, geologists and other experts can determine the breadth of hazards (if any), and help the County determine mitigation measures necessary to minimize impacts on the resulting occupants, surrounding property owners, and public infrastructure. Under current ordinances, if a site is in a study area it is required that the land owner has an expert review for such hazards, and offer the results and recommendations to the County's Land Use Authority for consideration during development review.<sup>3</sup>

Staff has become aware that the current Natural Hazards Overlay Zone specifies that only the Planning

<sup>&</sup>lt;sup>1</sup> See LUC §104-27.

<sup>&</sup>lt;sup>2</sup> LUC §104-27 was originally created with specific hazards maps; however, mapping of hazards throughout Weber County has evolved since then. The Utah Geological Survey currently has several relevant mapping resources, including an online map service.

Commission is the Land Use Authority for development that is located within a natural hazard study area. While this provision may make sense for certain types of more complicated applications, it does not lend to an efficient or expedient review of simple applications, like single family dwelling building permits.

Additionally, this requirement conflicts with other provisions in the Land Use Code. Those provisions designate other entities, such as the Planning Director or the County Commission, as the Land Use Authority for some types of applications.<sup>4</sup>

We are now emerging into a busy building season. Without the proposed modifications there will be a significant delay for building permit applications while they wait for a Planning Commission review of natural hazards. There is significant urgency to get the proposal adopted to replace the existing code. For this reason, this proposal has been expedited for Planning Commission review without the typical work session deliberation. It is critical to the current building season to get the changes completed as soon as possible.

Despite the expedited nature of this proposal, staff took considerable time and effort carefully reviewing and modifying the ordinance. Review and modification has been a cross collaboration between the Planning Division, Engineering Division, Attorney's Office, and outside expert legal counsel. We have also reached out to a private geologist for comments.

Through this careful evaluation it became apparent that there is significant work needed on this ordinance, including the need for clarifying provisions, and in some places, reconstruction. This proposal makes a best effort to initiate the effort, but only provides an intermediary solution to resolve the Land Use Authority problem, and a few other simple clarifications.

The proposal provides better consideration for the designated Land Use Authority when considering natural hazards; it also helps clarify the role of the Planning Director in certain Land Use Authority decisions; and then, generally, it provides for clarity, removes redundancies, and includes process steps and appeal provisions for reviews of projects when natural hazards are present.

## Policy Analysis

**Recommended method of reviewing the proposal.** The complete proposal is presented in the attached exhibits in track changes. The exhibits provide a more specific analysis of the changes in the text-balloons in the margins.

The proposal is lengthy. To ease in the Planning Commission's review, consider the following. Exhibit B is the complete text of the proposed changes, which is in the same format that the proposal will be presented to the County's codifiers. However, because the natural hazards code is being removed from §104-27 and added into §108-22, this exhibit does not emphasize in track-changes all of the changes being made between the two. Rather, it only shows that §104-27 was deleted and §108-22 was added. For this reason staff offers Exhibit D, which is a document that emphasizes in track-changes what changes are occurring between the current §104-27 to the proposed §108-22. Staff recommends that the Planning Commission starts their review with Exhibit D. Some members of the Planning Commission have previously requested clean copies with the track-change copies, thus Exhibit C is being provided as well. It is the same thing as Exhibit B, but without track-changes.

A brief synopsis of the changes is provided below.

<u>Policy considerations</u>. It can be noted that throughout the proposal the term "planning commission" has been replaced with "land use authority." This is because the code designates different land use authorities for different types of permits. For example, the Planning Director is the land use authority for approving alternative lot access, the Planning Commission is the land use authority for approving conditional use permits, and the County Commission is the land use authority for approving road dedications. By changing Planning Commission to Land Use Authority the proposal points the reader back to whomever is the Land Use Authority for a given permit type, as otherwise designated elsewhere in the code.

The current code could be more clear for what types of permits, and under what circumstances, the Planning Director is the land use authority. This proposal addresses that.

<sup>&</sup>lt;sup>4</sup> For example, LUC §102-1-2 sets up certain land use authority permissions for the planning director.

This proposal also addresses the fact that current ordinances are made unnecessarily complicated by requiring natural hazards to be administered through a hillside review process rather than by a typical natural hazards review process. There is unnecessary overlap between the ordinances. This proposal separates the hillside review process from the natural hazards review process, and establishes better procedural guidelines for natural hazards review.

This proposal moves the natural hazards ordinance from Title 104 – Zones, to Title 108 – Standards. There are a couple of reasons for doing this. The first, natural hazards really are not zones. A zone has legislatively created boundaries intended to organize land uses based on the public will of the community. The existence of natural hazards is not subject to the will of the legislative body, and their boundaries cannot be changed by community desire. Natural hazards are more akin to hillside development or source protection areas than they are zones. It is better to create standards for development on them rather than try to govern them by a zone. Second, the natural hazards ordinance provides for a method of changing the natural hazards maps when it can be proven that the suspected hazard is not actually present. If the natural hazards ordinance is considered a "zone" and mapped as a "zoning overlay" any of these changes would be subject to the typical rezone process, which is an unnecessary complication for such a highly technical consideration.

This proposal brings the appeal process for geologic hazards into compliance with the governing state statutes.

### Conformance to the General Plan

Generally, land use code changes should be vetted through the filter of policy recommendations of the applicable general plan. There are not specific recommendations regarding this proposal in either of the County's plans, however, it can be determined by the Planning Commission that the proposal is not in conflict with the general plan's guidance.

### Past Action on this Item

No action has occurred on this item.

### Noticing Compliance

A hearing for this item before the Planning Commission has been posted for public notice in compliance with UCA §17-27a-205 and UCA §17-27a-502 in the following manners:

- Posted on the County's Official Website
- Posted on the Utah Public Notice Website
- Published in a local newspaper

## Staff Recommendation

Staff recommends approval of the text included as Exhibit B and Exhibit C with the following findings:

- 1. The changes are necessary to reduce conflicting provisions in the Land Use Code.
- 2. The changes are necessary to provide clarity in the Land Use Code.
- 3. The clarifications will provide for a more efficient administration of the Land Use Code.
- 4. The changes comply with the intent of the Land Use Code.
- 5. The changes are not detrimental to the effect of the general plan.
- 6. The changes are not found to be detrimental to the health, safety, and welfare of County residents.

The Planning Commission's decision should be made as a recommendation to the County Commission.

## Exhibits

- A. Summary, List, and Key to Proposed Changes.
- B. Code Change [Redlines] Natural Hazards Code.
- C. Code Change [Clean] Natural Hazards Code. [Omitted from this packet due to length. You can find it in the Miradi project file].
- D. Comparison of only the current and proposed Natural Hazards ordinances.
- E. Land Use Code Revision Process Flowchart.

## Exhibit A: Summary, list, and key to proposed changes

The following code changes are being proposed to clarify that the Planning Commission is not the only land use authority over projects with natural hazards, and to provide clarity, remove redundancies, and include process steps and appeal provisions for natural hazards reviews.

This change addresses the following code sections:

§ 101-1-7. Definitions

- § 102-1: General provisions
- § 104-27: Natural hazards overlay districts
- § 108-7: Supplementary and qualifying regulations
- § 108-14: Hillside development review procedures and standards

Key to reading track changes:

Three periods (...) indicates that there are codes sections that have been left out of the proposed changes. These code sections will remain unchanged.

Language that has been added is shown in blue underline

Language that has been moved to a new location is shown in green double strikeout

Language that has been deleted is shown in red strikeout

Language that has been moved from an old location is shown in green double underline

1	Title 101 - GENERAL PROVISIONS	
2		
3	Sec. 101-1-7 Definitions.	
4	l	
5 6 7 8	Building parcel designation. The term "building parcel designation" means two or more lots within an approved subdivision are recognized as one lot for building purposes. This does not allow for the creation of additional lots, and the original lot lines as recorded do not change. The planning director can administratively approve a building narreel designation application.	Commont [c1]: Currently there is only this
9	"	definition explaining what a building parcel designation is, but not any statutes allowing it. A statute has been added in 108-7-33 (herein) that
10	Geologic and Geotechnical terms.	uses this stricken language, and provides additional
<b>1</b> 1 12 13	Active fault. The term "active fault" means a seismic (earthquake) fault displaying evidence of greater than four inches of surface displacement along one or more of its traces during Holocene time (approximately 10,000 years ago to the present).	routine procedure.  Comment [c2]: All of the definitions in the natural hazards ordinance were removed and added
14 15	Active landslide. The term "active landslide" means a landslide which is known to have moved or deformed and which has not been proven to be stable by a geotechnical investigation.	here. Some of these definitions were supplemented with the definitions found in the natural hazards codes. Some have been re-worked or updated for
16 17	Aquifer. The term "aquifer" means a geological unit in which porous and permeable conditions exist or a geologic unit of stratified drift, and thus are capable of yielding usable amounts of water.	clarity or best management practices. All definitions have been cross referenced for their use in other chapters to verify consistency.
18 19 20	Aquifer recharge. The term "aquifer recharge" area means an area that has soils and geological features that are conducive to allowing significant amounts of surface water to percolate into groundwater.	
21	Area of deformation. See "zone of deformation."	
22 23 24	Critical acceleration. The term "critical acceleration" means the minimum amount of ground acceleration during seismically induced ground movement required to induce liquefaction or other forms of ground disruption.	
25	Critical facilities. The term "critical facilities" means:	
26 27	(1) Lifelines such as major communication, utility and transportation facilities and their connection to emergency facilities;	
28	(2) Essential facilities, such as:	
29	a. Hospitals and other medical facilities having surgery and emergency treatment areas;	
30	b. Fire and police stations;	
31 32 33	c. Tanks or other structures containing, housing, or supporting water or other fire- suppression materials or equipment required for the protection of essential or hazardous facilities, or special occupancy structures;	
34	d. Emergency vehicle shelters and garages;	
35	e. Structures and equipment in emergency-preparedness centers;	
36	f. Standby power generating equipment for essential facilities;	
37 38	<ul> <li>g. Structures and equipment in government communication centers and other facilities required for emergency response;</li> </ul>	

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39 40 41	(3) Hazardous facilities such as structures housing, supporting or containing sufficient guantities of toxic or explosive substances to be dangerous to the safety of the general public if released; or	
42	(4) Special occupancy structures, such as:	
43 44	<ul> <li>a. Covered structures whose primary occupancy is public assembly (capacity greater than 300 persons);</li> </ul>	
45 46	<ul> <li><u>Buildings for schools through secondary or day care centers (capacity greater than 50 students);</u></li> </ul>	
47	c. Buildings for colleges or adult education schools (capacity greater than 50 students);	
48 49	<ul> <li>Medical facilities with 50 or more resident incapacitated patients, but not included above;</li> </ul>	
50	e. Jails and detention facilities;	
51	f. All structures with occupancy greater than 5,000 persons;	
52 53	<ul> <li>g. Structures and equipment in power-generating stations and other public utility facilities not included above, and required for continued operation;</li> </ul>	
54 55 56 57 58 59 60	h. Unique or large structures whose failure might be catastrophic, such as dams holding over ten acre feet of water. —lifelines, such as major communication, utility and transportation facilities and their connection to emergency facilities, unique or large structures whose failure might be catastrophic, such as dams or buildings where explosive, toxic or radioactive materials are stored or handled, high occupancy buildings such as schools, hotels, offices, emergency facilities, such as police and fire stations, hospitals, communication centers and disaster response facilities.	
61 62 63	Debris flow. The term "debris flow" means a mass of rock fragments, soil, and mud which, when wet, moves in a flow-like fashion. Debris flows will follow a confined channel, but may alter course if present on an alluvial/debris fan surface.	
64 65 66 67	Engineering geologist. The term "engineering geologist" means a geologist who, through education, training and experience, is able to assure that geologic factors affecting engineering works are recognized, adequately interpreted and presented for use in engineering practice and for the protection of the public. This person shall have:	
68 69	(1) At least a four-year degree in geology, engineering geology, or a related field from an accredited university; and	
70 71	(2) At least three full years of experience in a responsible position in the field of engineering geology.	
72	(3) A Utah State Professional Geologist's license.	Comment [c3]: New standard.
73 74 75	Engineering geology. <u>The term "engineering geology"</u> means the application of geological data and principles to engineering problems dealing with naturally occurring rock and soil for the purposes of assuring that geological factors are recognized and adequately interpreted in engineering practice.	
76 77	Fault. The term "fault" means a fracture in the earth's crust forming a boundary between rock or soil masses that have moved relative to each other (also see "active fault").	
78 79	Fault scarp. The term "fault scarp" means a steep slope or cliff formed directly by movement along a fault.	
80 81	Fault trace. The term "fault trace" means the intersection of the fault plane with the ground surface.	
82   83	Fault zone. The term "fault zone" means a corridor of variable width along one or more fault traces.	

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84	Geotechnical report. The term "geotechnical report" means a technical report or study prepared
85	by a geotechnical professional who is qualified in the field of expertise examined and analyzed in
85	such a report. A person shall be considered "qualified" upon presentation of credentials providing
88	geology, geotechnics and/or geotechnical engineering.
89 90	Landslide. The term "landslide" means a general term for the down slope movement of a mass of soil, surficial deposits or bedrock.
91	Liquefaction. The term "liquefaction" means a process by which certain water saturated soils
92	lose bearing strength because of ground shaking and increase of groundwater pore pressure.
93	Liquefaction potential categories depend on the probability of having an earthquake within a 100-
94	year period that will be strong enough to cause liquefaction in those zones. High liquefaction
95	potential means that there is a 50% probability of naving an earthquake within a 100-year period that
96 97	50%, low means that the probability is between 5% and 10%, and very low means less than 5%.
98	Natural hazard. The term "natural hazard" means any hazard listed in Section 108-22-2.
99	including, but not limited to, liquefaction, surface fault rupture, rock fall, debris flow, flood, tectonic
100	subsidence, landslide and other hazards.
101	Natural hazard map. The term "natural hazard map" means any map that has been published
102	by a qualified professional or applicable governmental agency, which contains the best available
103	information, as determined by the County Engineer, and which delineates a potential natural hazard.
104	Natural hazard study area. The term "natural hazard study area" means any area identified on
105	any natural hazard map or within any natural hazard studies or reports as having potential for being
106	a natural hazard. In addition, the County Engineer has discretion to identify a natural hazard study
107	area as a new nazard or potential nazard becomes known.
108 109	Rock fall. The term "rock fall" means the gravity-induced drop of a newly detached segment of bedrock or perched rock of any size from a cliff or steep slope.
110	Structure designed for human occupancy. The term "structure designed for human occupancy"
111	means any residential dwelling or any other structure used or intended for supporting or sheltering
112	any use or occupancy which is expected to have occupancy rate of more than 2,000 person-hours
113	per year.
114 115	Zone of deformation. The term "zone of deformation" means the zone along a fault in which natural soil and rock materials are disturbed as a result of movement along the fault.
116	
117	Title 102 - ADMINISTRATION
118	CHAPTER 1 GENERAL PROVISIONS
119	Sec. 102-1-1 Purpose and intent.
120	The purpose of this section is to establish regulations and procedures for the processing and
121	consideration of applications allowed by this Land Use Code.
122	Sec. 102-1-2 Administrative Planning director authority.
123	(a) The planning director, or his designee, is authorized to deny, approve, or approve with conditions an
124	application for an administrative approval. Administrative approval can be given for the following
125	applications:
126	(1) Site plan approval when required by this Land Lies Code, for which the Land Lies Authority is not
127	otherwise specified by this Land Use Code;
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**Comment [c4]:** The changes in this section are Intended to clarify the role of the Planning Director when acting as the Land Use Authority.

Page 3

- 128 (2) site plans Design review for with buildings under 10,000 square feet located on a parcel loss than 129 one acre in size, and which impact an area of less than one acre, as provided in Section 108-1-2;
- 130 (3) Hhome occupations with or without visiting clientele., as provided in Section 108-13-2;
- 131 (4) Building parcel designation, as provided in Section 108-7-33;
- (5) combining of lots within an approved subdivision which meet ordinance requirements, minor
   Small subdivisions as defined by the subdivision definition, as provided in Section 106-1-8(f) of this
   Land Use Code; and
- (6) <u>F</u>flag lots, access to a lot/parcel using a private right-of-way or access easement, and access to
   a lot/parcel at a location other than across the front lot line-, <u>as provided in Title 108, Chapter 7 of</u>
   this Land Use Code.
- (b) The planning director may deny an application for an administrative approval if the use fails to comply with specific standards set forth in this <u>chapter\_Land Use Code</u> or if any of the required findings are not supported by evidence in the record as determined by the director. At the discretion of the planning director, the planning commission can hear the request for an administrative approval.
- (bc) The administrative planning director approval process includes public notice and comment from adjacent property owners, <u>whenes</u> required by <u>this Land Use Code or</u> state code.
- 145 ...

#### 146 Sec. 102-1-4. - Notice of decision.

147 After hearing reviewing the evidence and considering the application, the approving authority (planning commission, planning director or his designee, board of adjustment, and county commission on 148 149 land use applications)Land Use Authority, as designated by this Land Use Code, shall make its findings 150 and decision. It shall then send have them entered in the minutes. Upon a decision by the approving authority, a notice of decision shall be mailed to the applicant at the address or e-mail address given in 151 the application. A notice of decision can be a new-written notice of decision, a copy of the written 152 153 administrative approval form signed by the planning director or designee, or a copy of the approved 154 minutes. A decision by the approving authorityLand Use Authority is final at the time the notice of decision 155 is issuedsent. If a notice of decision is not sent, and the decision was made in a meeting where minutes are kept, the decision shall be final on the date the minutes from the meeting are approved by the 156 approving authorityLand Use Authority. The planning division shall also mail notice of any decisions to 157 158 any person or agency who, in writing, requested such notification before the decision was rendered. 159 Unless the Land Use Authority's final decision specifies otherwise. Dthe Land Use Authority's decisions isare subject to requirements and conditions stated in the staff report and, if applicable, listed in the 160 161 meeting minutes.

- 162 ...
- 163 Title 104 ZONES
- 164 ...

165 CHAPTER 27. - RESERVEDNATURAL HAZARDS OVERLAY DISTRICTS

- 166 Sec. 104-27-1. Purpose and intent.
- 167 (a) The purpose and intent of this chapter is to coordinate the application of natural hazards
- 168 guidelines and standards, in order to protect the health, welfare and safety of the citizens of the county,
- 169 and to minimize potential effects of natural and manmade hazards by identifying known hazardous

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Comment [c5]: Here is part of the new statute of for "building parcel designation." See the rest in 108-7-33.

Comment [c6]: This land use code no longer references "minor subdivisions." Only "small subdivisions."

**Comment [c7]:** Changes to this section clarify the role of the land use authority when offering a final decision and when notifying the applicant of the decision.

**Comment [c8]:** This whole section has been moved in its modified form to section 108-22. This removes it from the zoning chapter and places it in the standards chapter where it belongs.

170 areas. This portion of the chapter specifies the areas for which an environmental analysis shall be 171 performed prior to development, the content of the analysis and the procedure by which development 172 applications requiring the analysis are reviewed and processed. 173 The county recognizes individual property rights and shall make every effort to balance the right 174 of the individual property owner with the health, welfare, safety and the common good of the general 175 public. 176 Sec. 104-27-2. - Potential hazards. 177 The following potential hazards have been identified: 178 -Surface-fault ruptures. (1) 179 Surface faulting has been identified as a potential hazard in the county. Maps have been <del>.</del> 180 produced delineating the known area where a hazard may exist from surface fault ruptures. Broad 181 subsidence of the valleys accompanying surface faulting may affect areas several miles away from the 182 fault. These effects are not considered here, but are covered in subsection b of this section. -Studies along the Wasatch fault have indicated that during a "characteristic" earthquake which 183 184 produces surface faulting, offsets of six feet or more may occur on the main trace of the fault zone. This 185 offset will result in formation of a near-vertical scarp, generally in unconsolidated surficial deposits, that begin to ravel and erode back to the material's angle of repose (33-35 degrees) soon after formation. 186 Antithetic faults west of the main trace may also form, generally exhibiting a lesser amount of offset, but 187 188 sometimes as much as several feet. The zone between these two faults may be complexly faulted and 189 tilted with offset along minor faults of several inches or more. 190 Based upon this data, it is difficult, both technically and economically, to design a structure to c. 191 withstand six feet or more of offset through its foundation. Thus, avoidance of the main traces of the 192 fault is the principal risk reduction technique that can be reasonably taken. No critical facility or structure for human occupancy shall be built astride an active fault. In some 193 d. 194 areas adjacent to the main trace but still within the zone of deformation, avoidance may not be 195 necessary. Less damaging (smaller) offsets of less than four inches, and tilting may occur and structural 196 measures may be taken to reduce casualties and damage. However, structural damage may still be 197 great, and buildings in the zone of deformation may not be safe for occupants following a large 198 earthquake. Due to the scale used to map these zones, there is not enough detail to delineate all fault traces 199 200 and zones of deformation at a particular location, therefore, site specific plans and studies shall be 201 required for development in or adjacent to the delineated areas. 202 f\_ 203 recommendations, produced by a qualified engineering geologist, setbacks shall be a minimum of 50

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204 feet from an active fault trace. A reduction in the setback will be considered if the report presents 205 evidence to justify a reduction acceptable to the planning commission. 206 (2) Landslide/tectonic subsidence. 207 Landslide, Landslides, historically, have been one of the most damaging geologic processes 208 occurring in Weber County, Most active landslides, and most older slides, have been mapped and are 209 shown on the Sensitive Lands Overlay District maps. These designations serve as an indication of unstable ground. The maps designate areas of landslides and slopes which are potentially unstable 210 211 under static (non-earthquake) conditions, and are especially vulnerable under conditions of high to 212 abnormally high precipitation. Landslides can damage structures, roads, railroads and power lines. Furthermore, landslides may rupture canals, aqueducts, sewers and water mains, all of which can add 213 214 water to the slide plane and promote further movement. Flooding may also be caused. 215 Many methods have been developed for reducing landslide hazards. Proper planning and avoidance is the least expensive measure, if landslide-prone areas are identified early in the planning 216 217 and development process. Care in site grading with proper compaction of fills and engineering of cut slopes is a necessary follow-up to good land use planning. Where avoidance is not feasible, various 218 219 engineering techniques are available to stabilize slopes, including de watering (draining), retaining structures, piles, bridging, weighting or buttressing slopes with compacted earth fills and drainage 220 221 diversion. Since every landslide and unstable slope has differing characteristics, any development 222 proposed within a designated landslide hazard area, as delineated on the Sensitive Lands Overlay 223 District maps, shall require the submittal, review and approval by the planning commission, of specific 224 site studies, including grading plans, cut/fill, and plans produced by a qualified engineering geologist and a Utah licensed geotechnical engineer. The site specific study shall address slope stability (including 225 natural or proposed cut slopes), evaluate slope failure potential, effects of development and 226 227 recommendations for mitigative measures. Slope stability analysis shall include potential for movement 228 under static, development-induced and earthquake-induced conditions as well as likely groundwater 229 conditions. 230 Tectonic subsidence. Tectonic subsidence, also called seismic tilting, is the warping, lowering and tilting of a valley floor that accompanies surface-faulting earthquakes on normal (dip slip) faults 231 232 such as the Wasatch fault zone. Inundation along the shores of lakes and reservoirs and the ponding of 233 water in areas with a shallow water table may be caused by tectonic subsidence. Certain structures which require gentle gradients or horizontal floors, particularly wastewater treatment facilities and 234 235 sewer lines may be adversely affected. 236 Because subsidence may occur over large areas (tens of square miles), it is generally not d. 237 practical to avoid the use of potentially affected land except in narrow areas of hazard due to lake

shoreline flooding. For gravity flow structures such as wastewater treatment facilities that are within
 areas of possible subsidence, it is advisable to consider the tolerance of such structures to slight changes
 in gradient. Some structures may have to be releveled after a large magnitude earthquake. Critical

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facilities which contain dangerous substances should have safety features to protect the structure, its 241 occupants and the environment from both tilting and flooding. 242 243 244 techniques such as raising structures above expected flood levels and dikes can be built. Development adjacent to lakes or reservoirs shall be prohibited within three feet of elevation above projected lake 245 246 levels to protect against natural rises from wet periods, storm waves and earthquake induced seiching, 247 as well as hazards associated with tectonic subsidence. 248 Rises in the water table accompanying tectonic subsidence may cause water to pond, flood 249 basements and disrupt buried facilities in areas of shallow groundwater adjacent to the fault on the 250 down dropped side. The principal application of the identified tectonic subsidence areas is to make the public aware 251 252 of the hazard and to indicate those areas where further study may be necessary. Site specific tectonic 253 subsidence studies are recommended only for critical facilities in areas of potential lake margin and 254 ponded shallow groundwater flooding. However, certain vulnerable facilities such as high cost 255 wastewater treatment plants and hazardous waste facilities should also consider potential tilting. 256 (3) Rock fall. 257 Rock falls are a naturally occurring erosional process in mountain areas in Weber County. As development advances higher onto the bench areas and into the canyons the risk from falling rocks 258 259 becomes greater. A primary mechanism responsible for triggering rock falls is water in outcrop discontinuities. Rock falls present a hazard because of the potential damage a large rock mass, traveling 260 at a relatively high velocity, could cause to structures and personal safety. Buildings shall be located so 261 that structures are not positioned in an area susceptible to rock falls. When new developments cannot 262 263 be designed around a rock fall path, and hazard reduction measures must be considered, a site specific plan and hazard study, with recommendations for mitigation, shall be produced by a qualified 264 engineering geologist, submitted for review and approval by the planning commission. Mitigation may 265 require design by a Utah licensed geotechnical engineer, and may include rock stabilization techniques 266 267 such as bolting, cable lashing, burying, and grouting discontinuities, removal or break-up of potential 268 rock clasts, as well as deflection berms, slope benches, and rock catch fences to stop or at least slow 269 down falling rocks. Strengthening a structure to withstand impact is an example of modifying what is at 270 risk. Mitigation problems can arise when rock source areas are located on land not owned by the 271 developer. In areas where the rock fall hazard is present but very low, disclosures of potential hazards to 272 land owners and residents with an acknowledgment of risk and willingness to accept liability may be an 273 274 acceptable alternative to avoidance or mitigation for single family residences.

275 (4) Debris flows.

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a. \_\_\_\_ Debris flows are mixtures of water, rock, soil and organic material (70-90 percent solids by 276 weight) that form a muddy slurry much like wet concrete and flow down slope, commonly in surges or 277 pulses, due to gravity. They generally remain confined to stream channels in mountainous areas, but 278 279 may reach and deposit debris over large areas on alluvial fans at and beyond canyon mouths. The county debris flow hazard maps were constructed from the boundaries of active alluvial 280 281 fans and areas with slopes steeper than 30 percent. Any proposed development in areas identified as 282 debris flow hazard areas shall be evaluated prior to approval of the proposed development. 283 —A study shall be prepared by an engineering geologist for any development proposed in or 284 adjacent to a debris flow hazard area and shall-include: 285 An analysis of the past history of debris flow at the site based on subsurface exploration to (1) 286 determine the nature and thickness of debris flow and related alluvial fan deposits. 287 (ii) An analysis of the drainage basin's potential to produce debris flows based on the presence of 288 debris slides and colluvium-filled slope concavities, and an estimate of the largest probable volumes likely to be produced during a single event. 289 An analysis of the stream channel to determine if the channel will supply additional debris, 290 impede flow, or contain debris flows in the area of the proposed development. 291 292 An analysis of manmade structures upstream that may divert or deflect debris flows. (iv) 293 (1) Recommendations concerning any channel improvements, flow modifications and catchment 294 structures, direct protection structures or floodproofing measures, if necessary, in order to protect the 295 development. Upon approval of the county engineer, the report shall be presented to the planning 296 (vi) 297 commission along with review comments for recommendation of approval by the county commission. 298 Liquefaction areas. (5) 299 Earthquake ground shaking causes a variety of phenomena which can damage structures and 300 threaten lives. One of these is termed soil liquefaction. Ground shaking tends to increase the pressure in the pore water between soil grains, which decreases the stresses between the grains. The loss of 301 302 intergranular stress can cause the strength of some soils to decrease nearly to zero. When this occurs, the soil behaves like a liquid. When liquefaction occurs, foundations may crack, buildings may tip, 303 304 buoyant buried structures such as septic tanks and storage tanks may rise, and even gentle slopes may fail as liquefied soils and overlying materials move down slope. 305 306 Areas of potential liquefaction have been delineated and the following regulations and b. 307 mitigation measures have been adopted in order to reduce the hazard and consequences. Areas of moderate to high liquefaction potential need not be avoided. Structural measures and site modification 308 techniques are available to reduce hazards. A site specific liquefaction study shall be required to be 309

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310	prepared, and shall be prepared by an engineering geologist and/or a state licensed geotechnical
311	engineer.
312	(i)Standard soil foundation study, for the proposed development, shall include liquefaction
313	potential evaluation based upon depth to groundwater, soil types and ground failure hazard.
314	(ii) If liquefiable soils are present, standard penetration tests and/or cone penetration tests shall be
315	required to determine critical accelerations needed to induce liquefaction.
316	(iii) Report shall include accurate maps of the area showing any proposed development, the location
317	of bore holes and/or test pits, the site geology, and location and depths of any liquefiable soils noted,
318	along with the probability of critical accelerations needed to induce liquefaction in these soils being
319	exceeded for appropriate time periods.
320	(iv) The report shall include recommendations for hazard-reduction techniques.
321	(v) The county engineer shall concur with the scope of the report, techniques and methodology to
322	be used in the preparation of the report and shall have input as to the specific types of information to be
323	included in the report.
324	(vi) Upon approval of the county engineer, the report shall be presented to the planning
325	commission along with review comments for recommendation of approval by the county commission.
326	(6) Flood. The floodplain standards are written to minimize the loss of life and property when floods
327	do occur, not to ban development outright from the floodplain. The Federal Emergency-Management
328	Agency (FEMA) has produced official floodplain maps, depicting areas of potential stream flooding for
329	major drainages in Weber County. FEMA recommends that no new development be permitted in the
330	100-year floodplain unless:
331	a. Detailed engineering studies, prepared by a state licensed engineer, show that the proposed
332	development will not increase the flood hazard to other property in the area. Recommendations shall be
333	made for floodproofing or other mitigation techniques for development within flood hazard areas. (Site
334	investigations for proposed development in lake-flooding areas near Great Salt Lake need only indicate
335	the site elevation. Development proposals in areas with elevations less than 4,218 feet will be reviewed
336	with respect to lake flooding potential and compatibility of proposed use.)
337	b. The proposed development is elevated above the 100 year flood base elevation.
338	c. For federally-insured loans, flood insurance is purchased from a company participating with the
339	Federal Insurance Administration or a like private carrier.
340	d. Upon approval of the county engineer, the report shall be presented to the planning
341	commission along with review comments for recommendation of approval by the county commission.

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342	<ol> <li>Alluvial fan flooding, which is not mapped under the FEMA program, may be a hazard on all</li> </ol>
343	active alluvial fans designated on the debris flow hazard maps. The hazard from such flooding shall be
344	addressed and appropriate hazard reduction measures taken.
345	2. Sheet flow. Certain areas of the Ogden Valley have been identified and mapped as areas of
346	sheet flow flooding. The hazard from such flooding shall be addressed and appropriate hazard reduction
347	measures taken.
348	<del>(7) Other hazardous areas.</del>
349	a. As in many counties in the Western United States, development in the county is constrained by
350	the presence of natural and manmade hazards. These hazards include avalanche, slope movement, soils
351	categorized as having severe building limitations and slopes exceeding 30 percent.
352	b. Not-all hazardous sites and conditions have been identified in the county; however,
353	development on those identified sites shall be permitted when projects are studied and designed by a
354	qualified engineering geologist and a state licensed civil engineer, architect and/or an engineering
355	geologist and certified to withstand the potential hazard for which it is designed, and that the site is
356	buildable and that the site is safe. This allows development on hazardous sites with the full
357	acknowledgment of the property owner. The use of hazardous sites for open space is encouraged.
358	Sec. 104-27-3 Supplementary hazards definitions.
359	The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to
360	them in this section, except where the context clearly indicates a different meaning:
361	Active fault means a fault displaying evidence of greater than four inches of displacement along one or
362	more of its traces during Holocene time (about 11,000 years ago to the present).
363	Area of deformation means the zone along a fault in which natural soil and rock materials are disturbed
364	as a result of movement along the fault. (Also Zone of Deformation.)
365	Critical acceleration means the minimum amount of ground acceleration during seismically induced
366	ground movement required to induce liquefaction or other forms of ground disruption.
367	Critical facilities means:
368	(1) Lifelines such as major communication, utility and transportation facilities and their connection
369	to emergency facilities;
370	(2) Essential facilities, such as:
371	a. Hospitals and other medical facilities having surgery and emergency treatment areas;
372	b. Fire and police stations;
· · · · ·	

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373	cTanks or other structures containing housing or supporting water or other fire suppression				
374	materials or equipment required for the protection of essential or hazardous facilities, or special				
375	occupancy structures;				
376	dEmergency vehicle shelters and garages;				
377	e. Structures and equipment in emergency-preparedness centers;				
378	fStandby power generating equipment for essential facilities;				
379	g. Structures and equipment in government communication centers and other facilities required				
380	for emergency response;				
381	(3) Hazardous facilities such as structures housing, supporting or containing sufficient quantities of				
382	toxic or explosive substances to be dangerous to the safety of the general public if released; or				
383	(4) Special occupancy structures, such as:				
384	a Covered structures whose primary occupancy is public assembly (capacity greater than 300				
385	persons);				
386	b. Buildings for schools through secondary or day care centers (capacity greater than 50 students);				
387	c. Buildings for colleges or adult education schools (capacity greater than 50 students);				
388	dMedical facilities with 50 or more resident incapacitated patients, but not included above;				
389	e. Jails and detention facilities;				
390	f All structures with occupancy greater than 5,000 persons;				
391	g Structures and equipment in power-generating stations and other public utility facilities not				
392	included above, and required for continued operation;				
393	h. Unique or large structures whose failure might be catastrophic, such as dams holding over ten				
394	acre feet of water.				
395	Debris flow means a mass of rock fragments, soil, and mud which, when wet, moves in a flow-like				
396	fashion. Debris flows will follow a confined channel, but may alter course if present on an alluvial/debris				
397	fan surface.				
398	Engineering geologist means a geologist who, through education, training and experience, is able to				
399	assure that geologic factors affecting engineering works are recognized, adequately interpreted and				
400	presented for use in engineering practice and for the protection of the public. This person shall have at				
401	least a four-year degree in geology, engineering geology, or a related field from an accredited university				
100	and at least three full years of experience in a responsible position in the field of engineering geology				

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403	Engineering geology means the application of geological data and principles to engineering problems
404	dealing with naturally occurring rock and soil for the purposes of assuring that geological factors are
405	recognized and adequately interpreted in engineering practice.
406	Fault means a fracture in the earth's crust forming a boundary between rock and soil masses that have
407	moved relative to each other (See Active fault).
408	Fault scarp means a steep slope or cliff formed directly by movement along a fault.
409	Fault trace means the intersection of a fault plane with the ground surface.
410	Fault zone means a corridor of variable width along one or more fault traces.
411	Landslide means a general term for the downslope movement of a mass of soil, surficial deposits or
412	bedrock.
413	Liquefaction means a process by which certain water-saturated soils lose bearing strength because of
414	ground shaking and increase of groundwater pore pressure.
415	Natural hazard means avalanche, liquefaction, surface fault rupture, rock fall, debris flow, flood, tectonic
416	subsidence and/or landslide.
417	Natural hazard maps means the overlay maps, which delineate hazards, such as avalanche, liquefaction,
418	surface fault rupture, rock fall and/or landslide areas.
419	Rock fall means the gravity-induced drop of a newly detached segment of bedrock or perched rock of
420	any size from a cliff or steep slope.
421	Structure designed for human occupancy means any residential dwelling or any other structure used or
422	intended for supporting or sheltering any use or occupancy which is expected to have occupancy rate of
423	more than 2,000 person-hours per year.
424	Sec. 104-27-4 Studies and reports required.
425	(a) Requirement for report. Any applicant requesting development on a parcel of land within a
426	natural hazards study area, as shown on the natural hazards maps, shall submit to the planning
427	commission six copies of site specific natural hazard studies and reports, where required for such
428	development according to the following chart.
429	(1) The natural hazards report and studies shall be prepared by an engineering geologist. In the case
430	of a snow avalanche hazard, the report shall be prepared by an experienced avalanche expert. The
431	report shall be signed by the preparer and shall also include the qualifications of the preparer.
432	(2) The report shall be site specific and identify all known or suspected potential natural hazards
433	originating on site or off site affecting the particular property.

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434 (3) The report shall include a detailed site map (scale: one inch equals 200 feet or larger), showing
 435 the location of the hazard with delineation of the recommended setback distances from the hazard and

436 the recommended location for structures.

437 (4) The report shall address the potential effects of the hazard on the proposed development and
 438 occupants thereof in terms of risk and potential damage.

439 (5) The report shall contain recommendations for avoidance or mitigation of the effects of the

440 hazard consistent with the purposes set forth in section 104-27-1 of this chapter. The evidence on which
 441 recommendations and conclusions are based shall be clearly stated in the report.

442 (6) Trench logs (scale: one inch equals five feet or larger), aerial photographs, references with

443 citations, and other supporting information as applicable, shall also be included in the report.

Liquefaction Potential High/Moderate	<del>Landslide/Rock</del> F <del>all/Debris Flow</del> Special Study Area	<del>Surface Fault</del> <del>Rupture</del> <del>Special Study</del> A <del>rea</del>
¥es	<del>Yes</del>	¥es
¥es	<del>Yes</del>	¥es
¥es	Yes	<del>Yes</del>
No**	<del>Yes</del>	Yes
No**	¥es	<del>Yes</del>
	Liquefaction Potential High/Moderate Yes Yes Yes No**	Liquefaction Potential High/ModerateLandslide/Rock Fall/Debris Flow Special Study AreaYesYesYesYesYesYesNe**YesNe**Yes

\*\*Although no special study is required, disclosure is required as described in section 104-27-7.

444

445 (b) Review of report. In order to fulfill the purposes of this chapter, the planning commission (for

446 conditional uses, site plan review, design review and subdivisions) shall review any proposed

447 development which requires preparation of a natural hazards report under this chapter to determine
 448 the possible risks to the safety of persons or property from natural hazards.

449 (1) Prior to consideration by the planning commission of any such development, the planning
 450 director shall submit the report to the Utah Geological and Mineral Survey, the U.S. Forest Service,

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451	and/or any other experts for review and recommendation. Any cost for the review shall be paid by the
452	applicant prior to any planning commission action.
453	(2) Whenever the planning commission determines that an area is subject to natural hazards which
454	present an unreasonable risk to the safety of persons or property, including public streets, such area
455	shall not be approved for development unless the applicant can demonstrate that such a risk can be
456	reduced to a reasonable and acceptable level in a manner which has a minimum effect on the natural
457	environment.
458	(3) The planning commission may set requirements necessary to reduce the risks from natural
459	hazards as a condition to the approval of any development which requires preparation of a natural
460	hazards report.
461	(c) Active fault consideration. No critical facility (excluding transportation lines or utilities which by
462	their nature-may cross active faults) or structures designed for human occupancy shall be built astride
463	an active fault. If a fault is discovered in the excavation for such a structure, a special study and report,
464	as described in subsection (a) of this section, shall be performed to determine if the fault is active, and if
465	the fault is determined to be active, the procedures set forth in subsection (b) of this section, shall be
466	followed. No structure designed for human occupancy shall be built on a fault scarp. Footing setbacks
467	from a fault scarp shall meet the requirements of chapter 29 of the Uniform Building Code. The planning
468	commission may increase footing setback requirements where information from a geotechnical report
469	indicates slope conditions warrant a greater setback distance.
470	Sec. 104-27-5 Disclosure required.
471	(a) When a natural hazard report shows that a hazard exists which affects a particular parcel, a copy
472	of the report shall be kept for public inspection in the county planning commission office. The natural
473	hazard report denoting the type and severity of the hazard, the professional who prepared the report,
474	the fact that the report is available to the public at the county planning department, and any restrictions
475	on the use of the parcel required within the natural hazards report shall be recorded as a deed covenant
476	running with the land, in the office of the county recorder, in addition to the following:
477	(1) Notice that the parcel is located within a natural hazards special study area as shown on the
478	natural hazards-map.
479	(2) Notice of the existence and availability of the natural hazards report for public inspection in the
480	county planning commission office.
481	(3) An agreement by the owner of the parcel and any successor in interest to comply with any
482	conditions set by the planning commission to minimize adverse effects of the natural hazard.
483	(4) When a natural hazard report is not required, but where the parcel is located within a mapped
484	hazardous area, as shown on one of the natural hazards overlay maps, notice that the parcel is located

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485	within such an area shall be recorded as a deed covenant running with the land in the county recorder's
486	office and shall be written in a form satisfactory to the county engineer and attorney.
487	(5) The natural hazards ordinance codified in this chapter and natural hazards maps represent only
488	those hazardous areas known to the county, and shall not be construed to include all possible potential
489	hazard areas. The natural hazards listed in this chapter and associated maps may be amended as new
490	information becomes available. The provisions of this chapter do not in any way assure or imply that
491	areas outside its boundaries will be free from the possible adverse effects of natural hazards. This
492	chapter shall not create liability on the part of the county, any officer or employee thereof for any
493	damages from natural hazards that result from reliance on this chapter or any administrative
494	requirement or decision lawfully made thereunder.
495	Sec. 104-27-6 Exemptions from filling natural hazard report.
496	Proposed development not occupied by humans shall not be required to provide a natural hazard
497	report, except critical facilities which shall be required to provide a report.
498	Sec. 104-27-7 Costs to be the responsibility of the developer/applicant.
499	Any of the above described technical reports and/or studies shall be performed by the required qualified
500	professional on behalf of the county through a third-party contract where all fees, costs and expenses
501	are the responsibility of the applicant. Any other costs incurred in providing technical reports or
502	testimony by expert witnesses shall be solely the responsibility of the applicant and not the county.
503	Sec. 104-27-8 Change of use.
504	No change in use which results in the conversion of a building or structure from one not used for human
505	occupancy to one that is so used shall not be permitted unless the building or structure complies with
506	the provisions of this chapter.
507	Sec. 104-27-9, Variances.
508	(a)Ability to grant. The county board of adjustment, when deciding appeals for variances of
509	distance or area within the Natural Hazards Overlay Zone shall follow both the standards of title 102,
510	chapter 3 of the Weber County Land Use Code and the standards stated below.
511	(b) Items to consider. In deciding whether to grant a variance and what conditions to attach to its
512	approval, the board of adjustment shall consider:
513	(1) The likelihood during a significant seismic or other geologic event that materials may be moved
514	onto adjacent land areas causing injury to persons or property;
515	(2) The degree of susceptibility to damage by seismic or other geologic activity for the building
516	design or use proposed;

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517	(3) The importance of the services of the proposed facility to the community and the need for the
518	facility to be functional following a significant event of geologic activity;
519	(4) The necessity of the facility to be in the proposed location or proposed design;
520	(5) Considering alternate locations and designs available;
521	(6) The ability of the community to provide emergency services to the facility in the event of a
522	<del>catastrophe;</del>
523	(7) The degree of benefit received from the variance relative to the hazards posed to the facility's
524	neighbors, visitors, and owners.
525	(c) Presumption relative to approval. Generally, the standards of this chapter shall not be varied
526	unless an equally safe method of use and construction can be approved.
527	(1) The amount of variance approved shall be only the minimum amount required to provide relief.
528	(2) A variance shall be granted only if it will not result in a threat to public safety, cause
529	extraordinary public expense, or create a nuisance.
530	(3) A variance shall be granted only if it will not result in a threat to public safety, cause
531	extraordinary public expense, or create a nuisance.
532	(4) In a continuum beginning with hay barns and agricultural structures and going to high rise
533	apartment buildings and auditoriums, the difficulty in obtaining a variance shall be greater for structures
534	with a high percentage of time when the structure is utilized by humans or is occupied by a large
535	number of people.
536	Sec. 104-27-10 Disputes; boundaries or mapped hazards.
537	The boundary lines of the special study areas shown on the Natural Hazards Overlay Maps shall be
538	determined by use of the scale appearing on the map. Where there is a conflict between the boundary
539	lines illustrated on the map and actual field conditions, or where detailed investigations show that the
540	mapped hazards are not present within a particular area, the dispute shall be settled as follows:
541	(1) The person disputing the hazard study area boundary or the mapped hazards present within a
542	particular area shall submit technical and geologic evidence to support such claim to the planning
543	commission in the form of a site-specific natural hazards report.
544	(2) The planning commission may request the Utah Geological Survey, the U.S. Forest Service,
545	and/or other experts to review the evidence prior to making a decision concerning the dispute.
546	(3) The cost of the review shall be paid by the person disputing the map.

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547 548	(4) The planning commission may allow deviations from the mapped boundary line only if the evidence clearly and conclusively establishes that the natural hazard study area boundary location is	
549	incorrect, or that the mapped hazards are not present within a particular area.	
550	(5) Any decision of the planning commission may be appealed to the board of county	
551	commissioners by filing an appeal within 15 days of the planning commission's decision.	
552	· · · · · · · · · · · · · · · · · · ·	
553	CHAPTER 7 SUPPLEMENTARY AND QUALIFYING REGULATIONS	
554		
555	Sec. 108-7-33 Building parcel designation	Comment [c9]: Here is the new statute for a
556 557	(a) Separate adjoining lots within an approved subdivision plat may be combined for building purposes without filing a formal subdivision plat amendment. The original lot lines, as recorded, do not change.	bunding parcer designation.
558	(b) A building parcel designation shall be approved provided that:	
559	(1) An application shall be submitted on a form approved by the Planning Director;	
560	(2) The application shall include a copy of the subdivision plat;	
561	(3) All lots proposed to be combined shall be under the same ownership;	
562	(4) No additional lot shall be created; and	
563 564 565	(5) The existing lots shall conform to the current zoning or be part of a platted cluster subdivision or PRUD. Existing lots that do not conform to current zoning shall require an amended subdivision plat.	
566		
567	CHAPTER 14 HILLSIDE DEVELOPMENT REVIEW PROCEDURES AND STANDARDS	<b>Comment [c10]:</b> Changes to this whole chapter are intended to separate hillside review process
568	Sec. 108-14-1 Purpose and intent.	from the natural hazards review process. More changes to this chapter can be anticipated in the
569 570 571 572 573 574 575 576 577 578	(a) It is recognized that the general provisions, definitions, procedures, improvements and design requirements, standards and principles set out in the Land Use Code of Weber County require supplementation to protect and preserve the public health, safety, and welfare in regard to hillside terrain and environmentally sensitive areas. When areas are subdivided or developed on sensitive areas, such features as special scil and geologic conditions, steep terrain, highly combustible native vegetation, and other conditions may nose serious potential consequences such as increased fire, flood or erosion hazards, traffic circulation problems, sewage disposal problems, property damage from extensive soils slippage and subsidence, and adverse effects from destruction of natural scenic beauty and unsightly developments. Such consequences may be avoided if special consideration is given to areas where one or more such conditions exist.	
579 580 581	(b) In the administration of the provisions of this chapter, the hillside development review board shall strive to achieve the objective of preserving the natural contours of the hillside areas by encouraging and requiring, where necessary, the following:	

582 (1) A minimum amount of grading which preserves the natural contours of the land.

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- (2) Retention of trees and other native vegetation (except in those cases where a high fire hazard
   results) which stabilizes steep hillsides, retains moisture, prevents eracion and orthances the
   natural scenic beauty.
- 586 (3) Construction of roads on steep hillsides in such a way as to minimize scars from cuts and fills 587 and avoid permanent scarring of hillsides.
- 588 (4) Placement of building sites in such a manner as to permit ample room for adequate defensible
   589 area as defined by the fire code, landscaping and drainage between and around the buildings.
  - (5) Grading which will eliminate the sharp angles at the top and toe of cut and fill slopes, both with respect to building sites and to road cross-sections.
  - (6) Lot and structure designs and location which will be appropriate in order to reduce geologic and environmental hazards, as required in of title 104, chapter 27, Natural Hazards Overlay District, as well as grading and natural topographic disturbance.
- 595 (7) Cluster type development or other new concepts and techniques, where appropriate, in order to 596 eliminate, as far as possible, construction on steep, sensitive or dangerous terrain.
- (8) Early temporary or permanent planting, or other materials, wherever appropriate to maintain
   necessary cut and fill slopes in order to stabilize them with plant roots or other materials,
   thereby preventing erosion and to conceal the raw soil from view.
- 600 ...

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#### 601 Sec. 108-14-3. - Applicability.

- (a) All parcels, subdivision lots, roads and accesses, where the natural terrain has average slopes at or
   exceeding 25 percent shall be reviewed by the Hillside Development Review Board as part of an
   application request for land use and building permits. Hillside Review is required as part of the
   preliminary subdivision review. This requirement may be waived by the <u>Pplanning Delirector</u> and the
   Ceounty Eengineer on a case-by-case basis.
- (b) The planning division shall not issue any land use permits, and the building official shall not issue any building permits until detailed plans and engineered drawings have been submitted to, and approved by the hillside development review board. Any condition attached to such approval by said board shall be a condition required with the issuance of land use permit. All parcels, subdivisions, lots, roads and accesses may come under consideration of the review board if requested by the owner, developer, or review agency. Other circumstances may warrant a review as found in the <u>Title</u>
  108 Chapter 22 Natural Hazard Areas, "Natural Hazards Overlay Districts" of title 104, chapter 27.
- 614

#### 615 Sec. 108-14-4. - Procedure.

616 Application plans and applications of the proposed development and any relevant information 617 regarding building and excavation of the site are to be submitted to the planning division. Information shall 618 include, but not be limited to the following:

- (1) Detailed engineering plans and profiles for retaining wall, cuts, filling and/or excavating of land.
- 620 (2) Site plan with contours.
- 621 (3) Cross sections of improvements.
- 622 (4) Retaining wall designs with engineers stamp (if applicable).
- 623 (5) Geotechnical report (site specific for structures) and, if applicable, an outside review of the
   624 geological report if deemed necessary verification of compliance with the requirements of Title
   625 108, Chapter 22 Natural Hazard Areas.
- 626 (6) Other studies and/or information deemed necessary by the members of the board.

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627 628 629 630	(7) Utah pollution discharge elimination system (UPDES) permit with stormwater pollution prevention plan (SWPPP) shall be required at the time of application. Erosion control landscaping on cuts, fills and other locations, considered necessary by the review board, shall be provided in order to prevent erosion.	
631	(8) A landscape plan as per section Section 108-14-10.	
632		
633	Sec. 108-14-9 <u>Reserved.</u> Geologic and other environmental considerations.	
634 635 636 637	(a) Geologic and other environmental constraints shall be considered by the review board when reviewing any developments on restricted lots or parcels of land. Mitigation measures shall be required as stated in title 104, chapter 27 the Natural Hazards Overlay District of the Weber County Land Use Code.	
638 639 640 641 642 643	(b) An outside review of the geological report may be done by an independent firm, at the discretion of the county engineer if he deems it necessary; the independent firm will be selected from a list, provided by the county, with all costs associated with the review paid by the applicant. The hillside development review board shall consider the findings, recommendations, and requirements of the report. If the applicant disagrees with the finding and reconditions and requirements of the independent firm, they may appeal to the board of adjustment.	
644		
645		
646	Sec. 108-14-11 Appeals.	Comment [c11]: This whole section is intended to clarify the appeal process, and bring the
647 648 649	(a) Except as allowed in subsection (b) of this section, an appeal of any written decision in the application of this chapter shall be appealed in accordance with Title 102, Chapter 3 – Board of Adjustment, of this Land Use Code.	ordinance into compliance with state statute.
650 651 652	(b) When a written decision provided under this chapter contains technical aspects, an applicant may request the County to assemble a panel of qualified professionals to serve as the appeal authority for the sole purpose of determining those technical aspects <sup>1</sup> .	
653 654	(1) The technical aspects of the administration and interpretation of this chapter are decisions related to:	
655 656	<ul> <li>a. the acceptance or rejection of scope, techniques, methodology, conclusions or specific types of information presented in a study or report;</li> </ul>	
657 658	<ul> <li>the review and recommendation of an acceptable study or report for the Land Use Authority's consideration; or</li> </ul>	
659 660	<ul> <li>the interpretation or application of any technical provisions of a study or report that is required by this chapter.</li> </ul>	
661 662	(2) Unless otherwise agreed by the applicant and County, if an applicant makes a request under this subsection, the County shall assemble the panel consisting of:	
663	a. one qualified professional designated by the County;	
664	b. one qualified professional designated by the applicant; and	
665 666	<ul> <li>one qualified professional chosen jointly by the County's designated qualified professional and the applicant's designated qualified professional.</li> </ul>	

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<sup>&</sup>lt;sup>1</sup> Note to codifiers: provide reference to UCA §17-27a-703(2)

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667 668	(3) A member of the panel may not be associated with the application that is the subject of the appeal.	
669	(4) The applicant shall pay for one half the cost of the panel in addition to the County's appeal fee.	
670 671	(5) The panel shall be governed by the same appeal provisions of the Board of Adjustment provided in Title 102, Chapter 3 - Board of Adjustment, of this Land Use Code.	
672 673	An appeal of the Hillside Development Review Board's decision shall be submitted to the county planning division:	
674 675 676 677 678 679 680	(1) The applicant, a board or officer of the county, or any person adversely affected by the Hillside Development Review Beard's decision administering or interpreting Hillside Development Review procedures and standards ordinance may, within the time period provided by ordinance, appeal that decision to the appeal authority by alleging that there is error in any order, requirement, decision, or determination made by the Hillside Development Review Board in the administration or interpretation of the hillside development review procedures and standards ordinance.	
681 682 683 684	(2) An applicant who has appealed a decision of the land use authority administering or interpreting the county's geologic hazard ordinance may request the county to assemble a panel of qualified experts to serve as the appeal authority for purposes of determining the technical aspects of the appeal.	
685 686 687	(3) If an applicant makes a request under subsection (1) of this section, the county shall assemble the panel described in subsection (4) of this section consisting of, unless otherwise agreed by the applicant and county:	
688	a. One expert designated by the county;	
689	b. One expert designed by the applicant; and	
690 691 692	c. One expert chosen jointly by the county's designated expert and the applicant's designated expert from a pre-approved list that the engineering division has assembled.	
693 694	(4) A member of the panel assembled by the county under subsection (3) of this section may not be associated with the application that is the subject of the appeal.	
695 696	(5) The applicant shall pay one-half of the cost of the panel and the county's published appeal fee.	
697		
698	CHAPTER 22. – NATURAL HAZARD AREAS	Comment [c12]: All of the changes from Section
699	Sec. 108-22-1 Purpose and intent.	form. See the comparison in Exhibit D to review the changes between them.
700 701 702 703 704 705	(a) The purpose and intent of this chapter is to coordinate the application of natural hazards guidelines and standards, in order to protect the health, welfare and safety of the citizens of the County, and to minimize potential effects of natural and manmade hazards by identifying known hazardous areas. This portion of the chapter specifies the areas for which an environmental analysis shall be performed prior to development, the content of the analysis and the procedure by which development applications requiring the analysis are reviewed and processed.	
706 707 708	(b) The County recognizes individual property rights and shall make every effort to balance the right of the individual property owner with the health, welfare, safety and the common good of the general public.	
709	Sec. 108-22-2 Potential hazards.	
710	The following potential hazards have been identified:	
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#### (1) Surface-fault ruptures.

- a. Surface faulting has been identified as a potential hazard in the County. Maps have been produced delineating the known area where a hazard may exist from surface fault ruptures. Broad subsidence of the valleys accompanying surface faulting may affect areas several miles away from the fault. These effects are not considered here, but are covered in subsection 3 of this section.
  - b. Studies along the Wasatch fault have indicated that during a "characteristic" earthquake which produces surface faulting, offsets of six feet or more may occur on the main trace of the fault zone. This offset will result in formation of a near-vertical scarp, generally in unconsolidated surficial deposits, that begin to ravel and erode back to the material's angle of repose (33-35 degrees) soon after formation. Antithetic faults west of the main trace may also form, generally exhibiting a lesser amount of offset, but sometimes as much as several feet. The zone between these two faults may be complexly faulted and tilted with offset along minor faults of several inches or more.
    - c. Based upon this data, it is difficult, both technically and economically, to design a structure to withstand six feet or more of offset through its foundation. Thus, avoidance of the main traces of the fault is the principal risk reduction technique that can be reasonably taken.
  - d. No critical facility (excluding transportation lines or utilities which by their nature may cross active faults) or structure designed for human occupancy shall be built astride an active fault. If a fault is discovered in the excavation for such a structure, a geologic hazard study and report, as provided in Section 108-22-3 of this Land Use Code, is required. In some areas adjacent to the main trace but still within the zone of deformation, avoidance may not be necessary. Less damaging (smaller) offsets of less than four inches, and tilting may occur and structural measures may be taken to reduce casualties and damage. However, structural damage may still be great, and buildings in the zone of deformation may not be safe for occupants following a large earthquake.
    - e. Due to the scale used to map these zones, there is not enough detail to delineate all fault traces and zones of deformation at a particular location, therefore, site specific plans, studies, and reports shall be required, as provided in Section 108-22-3 of this Land Use Code, for development in or adjacent to the delineated areas.
    - f. Building setbacks shall be a minimum of 50 feet from an active fault trace. A reduction in the setback may be considered if the report presents evidence to justify a reduction acceptable to the Land Use Authority, after recommendation from the County Engineer.
- (2) Landslide.
  - a. Landslides, historically, have been one of the most damaging geologic processes occurring in Weber County. Most active landslides, and most older slides, have been mapped. The maps identify areas of landslides and slopes which are potentially unstable under static (non-earthquake) conditions, and are especially vulnerable under conditions of high to abnormally high precipitation, heavy snowmelt, or excessive water application due to irrigation or septic system discharge. Landslides can damage structures, roads, railroads and power lines. Furthermore, landslides may rupture canals, aqueducts, sewers and water mains, all of which can add water to the slide plane and promote further movement. Flooding may also be caused.
- b. Many methods have been developed for reducing a landslide hazard. Proper planning and avoidance is the least expensive measure, if landslide-prone areas are identified early in the planning and development process. Care in site grading with proper compaction of fills and engineering of cut slopes is a necessary follow-up to good land use planning. Where avoidance is not feasible, various engineering techniques are available to stabilize slopes, including de-watering (draining), retaining structures, piles, bridging, weighting or buttressing slopes with compacted earth fills and drainage diversion. Since every landslide and unstable slope has differing characteristics, any development proposed within an

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identified landslide hazard area shall require the submittal and review of a study and report, as provided in Section 108-22-3. The study and report shall address slope stability (including natural or proposed cut slopes), evaluate slope-failure potential, effects of development and recommendations for mitigative measures. Slope stability analysis shall include potential for movement under static, development-induced and earthquake-induced conditions as well as likely groundwater conditions.

(3) Tectonic subsidence.

- a. Tectonic subsidence, also called seismic tilting, is the warping, lowering and tilting of a valley floor that accompanies surface-faulting earthquakes on normal (dip slip) faults such as the Wasatch fault zone. Inundation along the shores of lakes and reservoirs and the ponding of water in areas with a shallow water table may be caused by tectonic subsidence. Certain structures which require gentle gradients or horizontal floors, particularly wastewater treatment facilities and sewer lines may be adversely affected.
- b. Because subsidence may occur over large areas (tens of square miles), it is generally not practical to avoid the use of potentially affected land except in narrow areas of hazard due to lake shoreline flooding. For gravity-flow structures such as wastewater treatment facilities that are within areas of possible subsidence, it is advisable to consider the tolerance of such structures to slight changes in gradient. Some structures may have to be releveled after a large-magnitude earthquake. Critical facilities which contain dangerous substances should have safety features to protect the structure, its occupants and the environment from both tilting and flooding.
- c. Flooding problems along lakes from tectonic subsidence shall be reduced using standard techniques such as raising structures above expected flood levels and dikes can be built. Development adjacent to lakes or reservoirs shall be prohibited within three feet of elevation above projected lake levels to protect against natural rises from wet periods, storm waves and earthquake induced seiching, as well as hazards associated with tectonic subsidence.
- d. Rises in the water table accompanying tectonic subsidence may cause water to pond, flood basements and disrupt buried facilities in areas of shallow groundwater adjacent to the fault on the down dropped side.
- e. The principal application of the identified tectonic subsidence areas is to make the public aware of the hazard and to indicate those areas where further study may be necessary. Site specific tectonic subsidence reports and studies are recommended only for critical facilities in areas of potential lake-margin and ponded shallow groundwater flooding. However, certain vulnerable facilities such as high cost wastewater treatment plants and hazardous waste facilities should also consider potential tilting.
- (4) Rock fall.
  - a. Rock falls are a naturally occurring erosional process in mountain areas in Weber County. As development advances higher onto the bench areas and into the canyons the risk from falling rocks becomes greater. A primary mechanism responsible for triggering rock falls is water in outcrop discontinuities. Rock falls present a hazard because of the potential damage a large rock mass, traveling at a relatively high velocity, could cause to structures and personal safety. When new developments cannot be designed around a rock fall path, and hazard reduction measures must be considered, a study and report as provided in Section 108-22-3, is required. Mitigation shall require design by a Utah licensed geotechnical engineer, and may include rock stabilization techniques such as bolting, cable lashing, burying, and grouting discontinuities, removal or break-up of potential rock clasts, as well as deflection berms, slope benches, and rock catch fences to stop or at least slow down falling rocks. Strengthening a structure to withstand impact is an example of modifying what is at risk. Mitigation problems can arise when rock source areas are located on land not owned by the developer.

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813	b. In areas where the rock fall hazard is present but very low, disclosure of a potential hazard
814	to land owners and residents with an acknowledgment of risk and willingness to accept
815	liability may be an acceptable alternative to avoidance or mitigation for single-family
816	residences.
817	(5) Debris flows.
818 819 820 821 822	a. Debris flows are mixtures of water, rock, soil and organic material (70-90 percent solids by weight) that form a muddy slurry much like wet concrete and flow down slope, commonly in surges or pulses, due to gravity. They generally remain confined to stream channels in mountainous areas, but may reach and deposit debris over large areas on alluvial fans at and beyond canyon mouths.
823	b. The County debris flow hazard maps were constructed from the boundaries of active
824	alluvial fans and areas with slopes steeper than 30 percent. Any proposed development in
825	areas identified as debris flow hazard areas shall be evaluated prior to approval of the
826	proposed development. A study and report, as provided in Section 108-22-3, shall be
827	prepared by an engineering geologist for any development proposed in or adjacent to a
828	debris flow hazard area and shall include:
829	<ol> <li>An analysis of the history of debris flow at the site based on subsurface exploration to</li></ol>
830	determine the nature and thickness of debris flow and related alluvial fan deposits. If,
831	in the engineering geologist's professional opinion, geologic conditions have changed
832	enough to render a debris flow inactive, the analysis may estimate the nature and
833	approximate thickness of the debris flow and related alluvial fan deposits in lieu of
834	subsurface exploration.
835	<ol> <li>An analysis of the drainage basin's potential to produce debris flows based on the</li></ol>
836	presence of debris slides and colluvium-filled slope concavities, and an estimate of
837	the largest probable volumes likely to be produced during a single event.
838	<ol> <li>An analysis of the stream channel to determine if the channel will supply additional</li></ol>
839	debris, impede flow, or contain debris flows in the area of the proposed development.
840	4. An analysis of manmade structures upstream that may divert or deflect debris flows.
841	<ol> <li>Recommendations concerning any channel improvements, flow modifications and</li></ol>
842	catchment structures, direct protection structures or floodproofing measures, if
843	necessary, in order to protect the development.
844	(6) Liquefaction areas.
845	a. Earthquake ground shaking causes a variety of phenomena which can damage structures
846	and threaten lives. One of these is termed soil liquefaction. Ground shaking tends to
847	increase the pressure in the pore water between soil grains, which decreases the stresses
848	between the grains. The loss of intergranular stress can cause the strength of some soils
849	to decrease nearly to zero. When this occurs, the soil behaves like a liquid. When
850	liquefaction occurs, foundations may crack, buildings may tip, buoyant buried structures
851	such as septic tanks and storage tanks may rise, and even gentle slopes may fail as
852	liquefied soils and overlying materials move down slope.
853	b. Areas of potential liquefaction have been delineated and the following regulations and
854	mitigation measures have been adopted in order to reduce the hazard and consequences.
855	Areas of moderate to high liquefaction potential need not be avoided. Structural measures
856	and site modification techniques are available to reduce a hazard. A site specific
857	liquefaction study and report shall be required pursuant to Section 108-22-3, and shall be
858	prepared by an engineering geologist and/or a state licensed geotechnical engineer and
859	shall comply with the following:

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<ol> <li>If liquefiable soils are present, standard penetration tests and/or cone penetration tests shall be required to determine critical accelerations needed to induce liquefaction.</li> <li>The study and report shall include an accurate map of the area showing any proposed development, the location of bore holes and/or test pits, the site geology, and location and depths of any liquefiable soils noted, along with the probability of critical accelerations needed to induce liquefaction in these soils being exceeded for appropriate time periods.</li> <li>The report shall include recommendations for hazard reduction techniques.</li> </ol>
<ol> <li><u>3.</u> The study and report shall include an accurate map of the area showing any proposed development, the location of bore holes and/or test pits, the site geology, and location and depths of any liquefiable soils noted, along with the probability of critical accelerations needed to induce liquefaction in these soils being exceeded for appropriate time periods.</li> <li><u>4.</u> The report shall include recommendations for hazard reduction techniques.</li> <li>(7) Flood.</li> </ol>
4. The report shall include recommendations for hazard reduction techniques. (7) Flood.
(7) Flood.
a. The floodplain standards are written to minimize the loss of life and property when floods do occur, not to ban development outright from the floodplain. In the event the following provisions conflict with those in Title 22 of the Weber County Code, the most restrictive shall apply. The Federal Emergency Management Agency (FEMA) has produced official floodplain maps, depicting areas of potential stream flooding for major drainages in Weber County.
<ul> <li>FEMA recommends that no new development be permitted in the 100-year floodplain unless;</li> </ul>
1. Detailed engineering study and reports, as required by Section 108-22-3, prepared by a state-licensed engineer, show that the proposed development will not increase the flood hazard to other property in the area. Recommendations shall be made for floodproofing or other mitigation techniques for development within flood hazard areas. (Site investigations for proposed development in lake-flooding areas near Great Salt Lake need only indicate the site elevation. Development proposals in areas with elevations less than 4,218 feet will be reviewed with respect to lake-flooding potential and compatibility of proposed use.)
2. The proposed development is elevated above the 100-year flood base elevation.
3. For federally-insured loans, flood insurance is purchased from a company participating with the Federal Insurance Administration or a like private carrier.
c The study and report, as may be required by Section 108-22-3, shall consider the following:
(i) Alluvial fan flooding, which is not mapped under the FEMA program, may be a hazard on all active alluvial fans identified on debris flow hazard maps. The hazard from such flooding shall be addressed and appropriate hazard reduction measures taken.
(ii) Sheet flow. Certain areas of the Ogden Valley have been identified and mapped as areas of sheet flow flooding. The hazard from such flooding shall be addressed and appropriate hazard reduction measures taken.
(8) Other hazards.
a. As in many counties in the Western United States, development in the County is constrained by the presence of natural and manmade hazards. These hazards include, but are not limited to, avalanche, slope movement, soils categorized as having severe building limitations and slopes exceeding 30 percent.
b. Not all hazardous sites and conditions have been identified in the County. As a hazard or potential hazard becomes known, the County has discretion to require any study and
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908	report that is necessary to understand how the hazard or potential hazard may impact
909	development. The study or report shall provide appropriate hazard mitigation measures.
910	Sec. 108-22-3 Studies and reports required.
911	(a) Requirement for a study and report. Unless otherwise exempted in Section 108-22-5, any
912	application for development on a parcel of land within a natural hazard study area shall be
913	submitted to the planning division with two hard copies and one electronic (pdf) copy of a site-
914	specific natural hazard study and report, where required for such development according to the
915	following chart:

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	Land Use (Type of Facility)	Liquefaction Potential High/Moderate	Landslide/Rock Fall/Debris Flow Study Area	Surface Fault Rupture Study Area	Tectonic Subsidence Study Area	Flood Study Area	Other Hazardous Areas
	Critical facilities	Yes	Yes	<u>Yes</u>	Recommended	Yes	As determined by the County Engineer
	Industrial, commercial, or multifamily (4 or more units)	Yes	Yes	Yes	No	Yes	As determined by the County Engineer
	Residential subdivisions	<u>No**</u>	Yes, unless otherwise provided by Section 108-22- 2(4)b.	Yes	No	Yes	<u>As determined</u> by the County <u>Engineer</u>
	<u>Residential,</u> <u>single</u> <u>lots/multifamily</u> <u>(less than 4</u> <u>units)</u>	<u>No**</u>	Yes, unless otherwise provided by Section 108-22- 2(4)b.	Yes	No	Yes	<u>As determined</u> by the County Engineer
	**Aith	nough no study and	d report is required	, disclosure is rec	quired as described	in Section 108-2	22-4.
17 18 19 20	(1) Each of a avala the qu	natural hazard snow avalanc nche expert. T ualifications of	study and report he hazard, the he study and re the preparer.	rt shall be pre study and re port shall be	pared by an eng eport shall be signed by the p	ineering geol prepared by reparer and	logist. In the cas an experience shall also includ
21 22 23	(2) Each practi which	natural haza icable, all know	rd study and wn or suspecte sonable likelihoo	report shall d potential na od of adversel	be site-specific atural hazard(s)	and identif originating originating of articular prop	y, to the exter on-site or off-si erty.
24 25 26	(3) Each 200 recon	natural hazard feet or larger nmended setba	study and repo ), showing the ick distances fro	ort shall includ location and m the hazard	le a detailed site ad type of haz and the recomm	e map (scale zard with de nended locati	one inch equa
27	(4) Each on th poten	natural hazard e proposed de tial damage.	study and repo velopment and	ort shall addre	ss the potential preof in terms of	adverse effe	cts of the haza
930 931	(5) Each mitiga	natural hazar	rd study and tified adverse e	report shall of the h	contain recomm azard consisten	nendations f	or avoidance of poses set forth i

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932 933	Section 108-22-1 of this chapter. The evidence on which recommendations and conclusions are based shall be clearly stated in the report.	
934 935 936	(6) Trench logs (scale: one inch equals five feet or larger), trench photos, aerial photographs, references with citations, and other supporting information, as applicable, shall also be included in each natural hazard study and report.	
937 938 939 940	(b) Review of the study and report. In order to fulfill the purposes of this chapter, the Land Use Authority shall review any proposed development which requires preparation of a natural hazard study and report under this chapter to determine the possible risks to the safety of persons or property from a natural hazard.	
941 942 943 944	(1) Prior to consideration by the Land Use Authority of any such development, the County Engineer may submit the study and report, and, if applicable, site specific plan, to outsourced qualified professionals for review and recommendation. Any cost for the review shall be paid by the applicant prior to any Land Use Authority action.	
945 946 947	(2) The County Engineer has discretion to reject the scope, techniques, methodology, conclusions, or specific types of information presented in the study and report if industry standards of care were not used. All conclusions of the study and report shall be supported by adequate data.	Commer potentiall aspects" f
948 949	(3) The County Engineer shall prepare a final review and recommendation of an acceptable study and report, and, if applicable, site specific plans, for the Land Use Authority's consideration.	for more of
950 951 952 953 954	(4) Whenever the Land Use Authority determines that an area is subject to a natural hazard which present an unreasonable risk to the safety of persons or property, including public streets, such area shall not be approved for development unless the applicant can demonstrate that such a risk can be reduced to a reasonable and acceptable level in a manner which has a minimum effect on the natural environment.	potential aspects" f panel for for more o
955 956 957	(5) The Land Use Authority may set requirements or conditions necessary to reduce the risks from a natural hazard as a condition to the approval of any development which requires preparation of a natural hazard study and report.	
958 959 960 961 962 963	(c) Study and report confirmation. The project engineering geologist shall submit with the study a signed and sealed confirmation letter that the study was conducted in accordance with industry standards of care, and that it complies with this Land Use Code and all other applicable laws. Written verification shall be provided from the issuer of professional errors and omissions liability insurance, in the amount of one million dollars (\$1,000,000.00), which covers the engineering geologist, and which is in effect on the date of preparation of all required studies and reports.	
964 965 966 967 968	(d) Development design confirmation. Whenever possible, avoidance of development in an area with an identified natural hazard is strongly encouraged. However, pursuant to requirements of this chapter, development in an area with an identified natural hazard shall be permitted when it is designed to mitigate, and is reasonably safe from, the identified hazard. Final design of the development shall not be accepted by the County unless:	
969 970 971 972 973	(1) The development's state licensed engineer, or if applicable, engineers, provide(s) the County with a signed and sealed confirmation letter stating that, pursuant to the considerations, findings, recommendations, and conclusions of the development's engineering geologist's study and report, the development has been designed to mitigate, and is reasonably safe from, the identified hazard.	
974 975 976 977	(2) The development's engineering geologist submits a signed and sealed confirmation letter stating that the final design of the development adequately provides for the considerations, findings, recommendations, and conclusions of the study and report, and is reasonably safe from the identified hazard.	
978 979	(3) Written verification is provided from the issuer(s) of professional errors and omissions liability insurance, in the amount of one million dollars (\$1,000,000.00), which covers the engineering	

**Comment [c13]:** This section is identified as potentially producing a decision of "technical aspects" for which an appeal may merit a special panel for review. See the new section 108-22-9(b) for more details.

**Comment [c14]:** This section is identified as potentially producing a decision of "technical aspects" for which an appeal may merit a special panel for review. See the new section 108-22-9(b) for more details.

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980 981	geologist and state licensed engineer(s), and which is in effect on the date of preparation of all required reports and certifications.
982	Sec. 108-22-4 Disclosure required.
983	(a) When a natural hazard report shows that a hazard exists which affects a particular parcel:
984	(1) a copy of the report shall be kept for public inspection in the County Planning Division Office.
985 986	(2) A covenant that runs with the land shall be recorded, and, if applicable, a note on the subdivision plat shall be required, which provide:
987	a. Notice that the parcel is located within a natural hazard study area;
988 989	<ul> <li>Notice that a natural hazard study and report is available for public inspection in the County Planning Division Office;</li> </ul>
990 991	c. Notice that a hazard has been identified on the parcel and the type and severity of the hazard;
992	<ul> <li>The professional who prepared the report, with his or her contact information;</li> </ul>
993 994	e. Any restrictions on the use of the parcel required within the natural hazard report, or by the Land Use Authority; and
995 996	f. An agreement by the owner of the parcel and any successor in interest to comply with the conditions set by the Land Use Authority to minimize adverse effects of the natural hazard.
997 998 999 000	(b) When a natural hazard report is not required, but where the parcel is located within a natural hazard study area, notice that the parcel is located within such an area shall be recorded as a covenant running with the land and noted on the subdivision plat (if applicable), and shall be written in a form satisfactory to the County Engineer and County Attorney.
001 002 003 004 005 006 007 008	(c) The natural hazard ordinance codified in this chapter and natural hazard map represent only those potentially hazardous areas known to the County, and shall not be construed to include all possible potential hazard areas. The natural hazards listed in this chapter may be amended as new information becomes available. The provisions of this chapter do not in any way assure or imply that areas outside its boundaries will be free from the possible adverse effects of a natural hazard. This chapter shall not create liability on the part of the County, any officer or employee thereof for any damages from a natural hazard that result from reliance on this chapter or any administrative requirement or decision lawfully made thereunder.
009	Sec. 108-22-5 Exemptions from natural hazard study and report.
.010 .011 .012	A proposed structure that is not a structure designed for human occupancy shall not be required to provide a natural hazard report, except a report shall be provided for a critical facility if required by Section 108-22-3.
013	Sec. 108-22-6 Costs to be the responsibility of the developer/applicant.
.014 .015 .016 .017 .018	Any of the above described technical reports and/or studies shall be performed by qualified professionals on behalf of the applicant. The cost of outsourced qualified professionals used by the County to aid in the review required in Section 108-22-3 is the responsibility of the applicant. Any other costs incurred in providing technical reports or testimony by qualified professionals or expert witnesses shall be solely the responsibility of the applicant and not the County.
019	Sec. 108-22-7 Change of use.
.020 .021 .022	No change in use which results in the conversion of a building or structure not designed for human occupancy to one designed for human occupancy shall be permitted unless the building or structure complies with the provisions of this chapter.
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1023	Sec. 108-22-8 Conflict between boundaries of study area or identified hazard.
1024 1025 1026	Where there is a conflict between the boundaries of an identified natural hazard study area and actual field conditions, or where detailed investigations show that the identified hazard is not present within a particular area, the conflict shall be settled as follows:
1027 1028 1029	(1) The person disputing the natural hazard study area boundary shall submit technical and geologic evidence to support such claim to the County Engineer in the form of a site-specific natural hazard report.
1030 1031 1032 1033	(2) The County Engineer may request outsourced qualified professionals to review the evidence and make a recommendation prior to making a final written decision concerning the dispute. The cost of the outsourced qualified professional's review shall be paid by the person disputing the boundary.
1034 1035 1036	(3) The County Engineer may allow modifications to the boundary only if the evidence clearly and conclusively establishes that the natural hazard study area boundary location is incorrect, or that the identified hazard is not present within a particular area.
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1038	Sec. 108-22-9 Appeals.
1039 1040 1041	(a) Except as allowed in subsection (b) of this Section, an appeal of any written decision in the application of this chapter shall be appealed in accordance with Title 102, Chapter 3 – Board of Adjustment, of this Land Use Code.
1042 1043 1044	(b) When a written decision provided under this chapter contains technical aspects, an applicant may request the County to assemble a panel of qualified professionals to serve as the appeal authority for the sole purpose of determining those technical aspects <sup>2</sup> .
1045 1046	(1) The technical aspects of the administration and interpretation of this chapter are decisions related to:
1047 1048	<ul> <li>a. the acceptance or rejection of scope, techniques, methodology, conclusions or specific types of information presented in a study or report;</li> </ul>
1049 1050	<ul> <li>the review and recommendation of an acceptable study or report for the Land Use Authority's consideration;</li> </ul>
1051 1052	c. the interpretation or application of any technical provisions of a study or report that is required by this chapter; or
1053	d. the modification of a natural hazard study area boundary.
1054 1055	(2) Unless otherwise agreed by the applicant and County, if an applicant makes a request under this subsection, the County shall assemble the panel consisting of:
1056	a. one qualified professional designated by the County;
1057	b. one qualified professional designated by the applicant; and
1058 1059	<ul> <li>one qualified professional chosen jointly by the County's designated qualified professional and the applicant's designated qualified professional.</li> </ul>
1060 1061	(3) A member of the panel may not be associated with the application that is the subject of the appeal.
1062	(4) The applicant shall pay for one half the cost of the panel in addition to the County's appeal fee

**Comment [c15]:** This section is identified as potentially producing a decision of "technical aspects" for which an appeal may merit a special panel for review. See the new section 108-22-9(b) for more details.

<sup>&</sup>lt;sup>2</sup> Note to codifiers: provide reference to UCA §17-27a-703(2)

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 (5) The panel shall be governed by the same appeal provisions of the Board of Adjustment provided in Title 102, Chapter 3 - Board of Adjustment, of this Land Use Code.

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Exhibit C (clean copy) omitted due to length. Please see Miradi project file to review it.

#### 1 CHAPTER 27.-22. - NATURAL HAZARDS OVERLAY DISTRICTS-HAZARD AREAS 2 Sec. 104-27108-22-1. - Purpose and intent. (a) The purpose and intent of this chapter is to coordinate the application of natural hazards guidelines 3 4 and standards, in order to protect the health, welfare and safety of the citizens of the countyCounty, 5 and to minimize potential effects of natural and manmade hazards by identifying known hazardous 6 areas. This portion of the chapter specifies the areas for which an environmental analysis shall be 7 performed prior to development, the content of the analysis and the procedure by which 8 development applications requiring the analysis are reviewed and processed. q The countyCounty recognizes individual property rights and shall make every effort to balance the (b) 10 right of the individual property owner with the health, welfare, safety and the common good of the 11 general public. 12 Sec. 104-27108-22-2. - Potential hazards. 13 The following potential hazards have been identified: 14 (1) Surface-fault ruptures. 15 Surface faulting has been identified as a potential hazard in the countyCounty. Maps have a. been produced delineating the known area where a hazard may exist from surface fault 16 17 ruptures. Broad subsidence of the valleys accompanying surface faulting may affect areas 18 several miles away from the fault. These effects are not considered here, but are covered 19 in subsection b3 of this section. 20 Studies along the Wasatch fault have indicated that during a "characteristic" earthquake b. which produces surface faulting, offsets of six feet or more may occur on the main trace of 21 22 the fault zone. This offset will result in formation of a near-vertical scarp, generally in 23 unconsolidated surficial deposits, that begin to ravel and erode back to the material's angle 24 of repose (33-35 degrees) soon after formation. Antithetic faults west of the main trace may 25 also form, generally exhibiting a lesser amount of offset, but sometimes as much as several feet. The zone between these two faults may be complexly faulted and tilted with 26 27 offset along minor faults of several inches or more. Based upon this data, it is difficult, both technically and economically, to design a structure 28 C 29 to withstand six feet or more of offset through its foundation. Thus, avoidance of the main traces of the fault is the principal risk reduction technique that can be reasonably taken. 30 31 d. No critical facility (excluding transportation lines or utilities which by their nature may cross 32 active faults) or structure designed for human occupancy shall be built astride an active fault. If a fault is discovered in the excavation for such a structure, a geologic hazard study 33 34 and report, as provided in Section 108-22-3 of this Land Use Code, is required. In some 35 areas adjacent to the main trace but still within the zone of deformation, avoidance may not be necessary. Less damaging (smaller) offsets of less than four inches, and tilting may 36 37 occur and structural measures may be taken to reduce casualties and damage. However, 38 structural damage may still be great, and buildings in the zone of deformation may not be 39 safe for occupants following a large earthquake. 40 Due to the scale used to map these zones, there is not enough detail to delineate all fault e. 41 traces and zones of deformation at a particular location, therefore, site specific plans and, studies, and reports shall be required, as provided in Section 108-22-3 of this Land Use 42 43 Code, for development in or adjacent to the delineated areas. 44 f. Upon submittal, review and planning commission approval of site specific plans and studies with recommendations, produced by a qualified engineering geologist, Building 45 46 setbacks shall be a minimum of 50 feet from an active fault trace. A reduction in the 47 setback willmay be considered if the report presents evidence to justify a reduction

**Comment [c1]:** All of the changes from Section 104-27 have been moved into this new section (108-22) in their modified form.

**Comment [c2]:** Current code is inconsistent about this. This corrects the inconsistency.

commission has control over development approvals where natural hazards are a concern. This amendment fixes that (you see these changes throughout).

Comment [c3]: Of specific concern, this

ordinance suggests that only the planning

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acceptable to the planning commission Land Use Authority, after recommendation from the County Engineer.

#### (2) Landslide/tectonic subsidence.

- a. Landslide. Landslides, historically, have been one of the most damaging geologic processes occurring in Weber County. Most active landslides, and most older slides, have been mapped and are shown on the Sensitive Lands Overlay District maps. These designations serve as an indication of unstable ground. The maps designate. The maps identify areas of landslides and slopes which are potentially unstable under static (non-earthquake) conditions, and are especially vulnerable under conditions of high to abnormally high precipitation-, heavy snowmelt, or excessive water application due to irrigation or septic system discharge. Landslides may rupture canals, aqueducts, sewers and water mains, all of which can add water to the slide plane and promote further movement. Flooding may also be caused.
- Many methods have been developed for reducing a landslide hazardshazard. Proper b. planning and avoidance is the least expensive measure, if landslide-prone areas are identified early in the planning and development process. Care in site grading with proper compaction of fills and engineering of cut slopes is a necessary follow-up to good land use planning. Where avoidance is not feasible, various engineering techniques are available to stabilize slopes, including de-watering (draining), retaining structures, piles, bridging, weighting or buttressing slopes with compacted earth fills and drainage diversion. Since every landslide and unstable slope has differing characteristics, any development proposed within a designated an identified landslide hazard area, as delineated on the Sensitive Lands Overlay District maps, shall require the submittal, and review and approval by the planning commission, of specific site studies, including grading plans, cut/fill, a study and plans produced by a qualified engineering geologistreport, as provided in Section 108-22-3. The study and a Utah licensed geotechnical engineer. The site specific study report shall address slope stability (including natural or proposed cut slopes), evaluate slopefailure potential, effects of development and recommendations for mitigative measures. Slope stability analysis shall include potential for movement under static, developmentinduced and earthquake-induced conditions as well as likely groundwater conditions.

#### 6.(3) Tectonic subsidence.

- a. Tectonic subsidence, also called seismic tilting, is the warping, lowering and tilting of a valley floor that accompanies surface-faulting earthquakes on normal (dip slip) faults such as the Wasatch fault zone. Inundation along the shores of lakes and reservoirs and the ponding of water in areas with a shallow water table may be caused by tectonic subsidence. Certain structures which require gentle gradients or horizontal floors, particularly wastewater treatment facilities and sewer lines may be adversely affected.
- db. Because subsidence may occur over large areas (tens of square miles), it is generally not practical to avoid the use of potentially affected land except in narrow areas of hazard due to lake shoreline flooding. For gravity-flow structures such as wastewater treatment facilities that are within areas of possible subsidence, it is advisable to consider the tolerance of such structures to slight changes in gradient. Some structures may have to be releveled after a large-magnitude earthquake. Critical facilities which contain dangerous substances should have safety features to protect the structure, its occupants and the environment from both tilting and flooding.
- ec. Flooding problems along lakes from tectonic subsidence shall be reduced using standard techniques such as raising structures above expected flood levels and dikes can be built. Development adjacent to lakes or reservoirs shall be prohibited within three feet of elevation above projected lake levels to protect against natural rises from wet periods, storm waves and earthquake induced seiching, as well as hazards associated with tectonic subsidence.

**Comment [c4]:** Added language to be clear that precipitation is not the only problem.

fd. Rises in the water table accompanying tectonic subsidence may cause water to pond, flood basements and disrupt buried facilities in areas of shallow groundwater adjacent to the fault on the down dropped side.

- ge. The principal application of the identified tectonic subsidence areas is to make the public aware of the hazard and to indicate those areas where further study may be necessary. Site specific tectonic subsidence reports and studies are recommended only for critical facilities in areas of potential lake-margin and ponded shallow groundwater flooding. However, certain vulnerable facilities such as high cost wastewater treatment plants and hazardous waste facilities should also consider potential tilting.
- (34) Rock fall.

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- Rock falls are a naturally occurring erosional process in mountain areas in Weber County. а As development advances higher onto the bench areas and into the canyons the risk from falling rocks becomes greater. A primary mechanism responsible for triggering rock falls is water in outcrop discontinuities. Rock falls present a hazard because of the potential damage a large rock mass, traveling at a relatively high velocity, could cause to structures and personal safety. Buildings shall be located so that structures are not positioned in an area susceptible to rock falls. When new developments cannot be designed around a rock fall path, and hazard reduction measures must be considered, a site specific plan and hazard study, with recommendations for mitigation, shall be produced by a qualified engineering geologist, submitted for review and approval by the planning commission. Mitigation maystudy and report as provided in Section 108-22-3, is required. Mitigation shall require design by a Utah licensed geotechnical engineer, and may include rock stabilization techniques such as bolting, cable lashing, burying, and grouting discontinuities, removal or break-up of potential rock clasts, as well as deflection berms, slope benches, and rock catch fences to stop or at least slow down falling rocks. Strengthening a structure to withstand impact is an example of modifying what is at risk. Mitigation problems can arise when rock source areas are located on land not owned by the developer.
  - b. In areas where the rock fall hazard is present but very low disclosures disclosure of a potential hazardshazard to land owners and residents with an acknowledgment of risk and willingness to accept liability may be an acceptable alternative to avoidance or mitigation for single-family residences.

#### (45) Debris flows.

- a. Debris flows are mixtures of water, rock, soil and organic material (70-90 percent solids by weight) that form a muddy slurry much like wet concrete and flow down slope, commonly in surges or pulses, due to gravity. They generally remain confined to stream channels in mountainous areas, but may reach and deposit debris over large areas on alluvial fans at and beyond canyon mouths.
- b. The county County d ebris flow hazard maps were constructed from the boundaries of active all vial fane and areas with slopes steeper than 30 percent. Any proposed development in areas identified as debris flow hazard areas shall be evaluated prior to approval of the proposed development.
- A study and report, as provided in Section 108-22-3, shall be prepared by an engineering geologist for any development proposed in or adjacent to a debris flow hazard area and shall include:
  - (i)1. An analysis of the past history of debris flow at the site based on subsurface exploration to determine the nature and thickness of debris flow and related alluvial fan deposits. If, in the engineering geologist's professional opinion, geologic conditions have changed enough to render a debris flow inactive, the analysis may estimate the nature and approximate thickness of the debris flow and related alluvial fan deposits in lieu of subsurface exploration.

**Comment [c5]:** Added language to facilitate common sense application of the law. This will help geologists still comply with the law while not conducting an expensive trench analysis when, in their opinion, it's obvious that subsurface exploration is not necessary.

151 152 153		(ii)2. An analysis of the drainage basin's potential to produce debris flows based on the presence of debris slides and colluvium-filled slope concavities, and an estimate of the largest probable volumes likely to be produced during a single event.
154 155 156		(iii)3. An analysis of the stream channel to determine if the channel will supply additional debris, impede flow, or contain debris flows in the area of the proposed development.
157 158		(iv)4. An analysis of manmade structures upstream that may divert or deflect debris flows.
159 160 161		(v)5. Recommendations concerning any channel improvements, flow modifications and catchment structures, direct protection structures or floodproofing measures, if necessary, in order to protect the development.
162 163 164		(vi) Upon approval of the county engineer, the report shall be presented to the planning commission along with review comments for recommendation of approval by the county commission.
165	<mark>(5_(6</mark> )	Liquefaction areas.
166 167 168 169 170 171 172 173	a.	Earthquake ground shaking causes a variety of phenomena which can damage structures and threaten lives. One of these is termed soil liquefaction. Ground shaking tends to increase the pressure in the pore water between soil grains, which decreases the stresses between the grains. The loss of intergranular stress can cause the strength of some soils to decrease nearly to zero. When this occurs, the soil behaves like a liquid. When liquefaction occurs, foundations may crack, buildings may tip, buoyant buried structures such as septic tanks and storage tanks may rise, and even gentle slopes may fail as liquefied soils and overlying materials move down slope.
174 175 176 177 178 179 180	b.	Areas of potential liquefaction have been delineated and the following regulations and mitigation measures have been adopted in order to reduce the hazard and consequences. Areas of moderate to high liquefaction potential need not be avoided. Structural measures and site modification techniques are available to reduce hazardsa hazard. A site specific liquefaction study and report shall be required pursuant to be preparedSection 108-22-3, and shall be prepared by an engineering geologist and/or a state licensed geotechnical engineer- and shall comply with the following:
181 182 183		(i)1. Standard soïl foundation study, for the proposed development, shall include liquefaction potential evaluation based upon depth to groundwater, soil types and ground failure hazard.
184 185 186		(ii)2. If liquefiable soils are present, standard penetration tests and/or cone penetration tests shall be required to determine critical accelerations needed to induce liquefaction.
187 188 189 190 191	l	(iii) Report3. The study and report shall include an accurate maps map of the area showing any proposed development, the location of bore holes and/or test pits, the site geology, and location and depths of any liquefiable solls noted, along with the probability of critical accelerations needed to induce liquefaction in these soils being exceeded for appropriate time periods.
192		(iv)4. The report shall include recommendations for hazard reduction techniques.
193 194 195		(v) The county engineer shall concur with the scope of the report, techniques and methodology to be used in the preparation of the report and shall have input as to the specific types of information to be included in the report.
196 197 198		(vi) Upon approval of the county engineer, the report shall be presented to the planning commission along with review comments for recommendation of approval by the county commission.

Comment [c6]: This language is removed from these subsections throughout and better consolidated into 108-22-3.

199 ]	(67) Flood.			
200 201 202 203 204 205 206	a. The floodplain standards are written to minimize the loss of life and property when floods do occur, not to ban development outright from the floodplain. In the event the following provisions conflict with those in Title 22 of the Weber County Code, the most restrictive shall apply. The Federal Emergency Management Agency (FEMA) has produced official floodplain maps, depicting areas of potential stream flooding for major drainages in Weber County. FEMA recommends that no new development be permitted in the 100-year floodplain unless:			
207	ab. FEMA recommends that no new development be permitted in the 100-year floodplain unless:			
209 210 211 212 213 214 215 216	1. Detailed engineering studiesstudy and reports, as required by Section 108-22-3, prepared by a state-licensed engineer, show that the proposed development will not increase the flood hazard to other property in the area. Recommendations shall be made for floodproofing or other mitigation techniques for development within flood hazard areas. (Site investigations for proposed development in lake-flooding areas near Great Salt Lake need only indicate the site elevation. Development proposals in areas with elevations less than 4,218 feet will be reviewed with respect to lake-flooding potential and compatibility of proposed use.)			
17	b2. The proposed development is elevated above the 100-year flood base elevation.			
18   19	63. For federally-insured loans, flood insurance is purchased from a company participating with the Federal Insurance Administration or a like private carrier.			
20   21   22	d. Upon approval of the county engineer, the report shall be presented to the planning commission along with review comments for recommendation of approval by the county commission.			
23	1.c The study and report, as may be required by Section 108-22-3, shall consider the following:			
25   26   27 28	(i) Alluvial fan flooding, which is not mapped under the FEMA program, may be a hazard on all active alluvial fans <u>designatedidentified</u> on <u>the</u> debris flow hazard maps. The hazard from such flooding shall be addressed and appropriate hazard reduction measures taken.			
29   30 31	2.(ii) Sheet flow. Certain areas of the Ogden Valley have been identified and mapped as areas of sheet flow flooding. The hazard from such flooding shall be addressed and appropriate hazard reduction measures taken.			
32	(78) Other hazardous areas.hazards.			
33 34 35 36	a. As in many counties in the Western United States, development in the <u>countyCounty</u> is constrained by the presence of natural and manmade hazards. These hazards include, <u>bu</u> <u>are not limited to</u> , avalanche, stope movement, soils categorized as having severe building limitations and slopes exceeding 30 percent.			
37 38 39 40 41 42 43 44 45 46	b. Not all hazardous sites and conditions have been identified in the eeunty; however, development on those identified sites shall be permitted when projects are studied and designed byCounty. As a qualified engineering geologist and a state licensed civil engineer, architect and/hazard or an engineering geologist and certified to withstand the potential hazard for which it is designed, and becomes known, the County has discretion to require any study and report that is necessary to understand how the site is buildable and that the site is safe. This allows development on hazardous sites with the full acknowledgment of the property ownerhazard or potential hazard may impact development. The use of hazardous sites for open space is encouraged study or report shall provide appropriate hazard mitigation measures.			

247	Sec. 104-27-3 Supplementary hazards definitions,	Comm all defin				
248 249	The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:					
250 251	Active fault means a fault displaying evidence of greater than four inches of displacement along one or more of its traces during Holocene time (about 11,000 years ago to the present).					
252 253	Area of deformation means the zone along a fault in which natural soil and rock materials are disturbed as a result of movement along the fault. (Also Zone of Deformation.)					
254 255	Critical acceleration means the minimum amount of ground acceleration during seismically induced ground movement required to induce liquefaction or other forms of ground disruption.					
256	Critical facilities means:					
257 258	<ol> <li>Lifelines such as major communication, utility and transportation facilities and their connection to emergency facilities;</li> </ol>					
259	(2) Essential facilities, such as:					
260	a. Hospitals and other medical facilities having surgery and emergency treatment areas;					
261	b. Fire and police stations;					
262 263 264	<ul> <li>Tanks or other structures containing housing or supporting water or other fire-suppression materials or equipment required for the protection of essential or hazardous facilities, or special occupancy structures;</li> </ul>					
265	d. Emergency vehicle shelters and garages;					
266	e. Structures and equipment in emergency-preparedness centers;					
267	f. Standby power generating equipment for essential facilities;					
268 269	<ul> <li>g. Structures and equipment in government communication centers and other facilities required for emergency response;</li> </ul>					
270 271	(3) Hazardous facilities such as structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be dangerous to the safety of the general public if released; or					
272	(4) Special occupancy structures, such as:					
273 274	<ul> <li>Covered structures whose primary occupancy is public assembly (capacity greater than 300 persons);</li> </ul>					
275 276	<ul> <li>Buildings for schools through secondary or day care centers (capacity greater than 50 students);</li> </ul>					
277	cBuildings for colleges or adult education schools (capacity greater than 50 students);					
278	d. Medical facilities with 50 or more resident incapacitated patients, but not included above;					
279	eJails and detention facilities;					
280	f. All structures with occupancy greater than 5,000 persons;					
281 282	<ul> <li>Structures and equipment in power-generating stations and other public utility facilities not included above, and required for continued operation;</li> </ul>					
283 284	<ul> <li>Unique or large structures whose failure might be catastrophic, such as dams holding over ten acre feet of water.</li> </ul>					
285 286 287	Debris flow means a mass of rock fragments, soil, and mud which, when wet, moves in a flow-like fashion. Debris flows will follow a confined channel, but may alter course if present on an alluvial/debris fan surface.					

**Comment [c7]:** This section is being deleted and all definitions are being moved into 101-1-7 (definitions). See Exhibit B to review changes to them

288	Engineering geologist means a geologist who, through education, training and experience, is able to			
289	assure that geologic factors affecting engineering works are recognized, adequately interproted and			
290	presented for use in engineering practice and for the protection of the public. This person shall have at			
291	least a four-year degree in geology, engineering geology, or a related field from an accredited university			
292	and at least three full years of experience in a responsible position in the field of engineering geology.			
293	Engineering geology means the application of geological data and principles to engineering			
294	problems dealing with naturally occurring reck and soil for the purposes of assuring that geological factors			
295	are recognized and adequately interpreted in engineering practice.			
296 297	Fault means a fracture in the earth's crust forming a boundary between rock and soil masses that have moved relative to each other (See Active fault).			
298	Fault scarp means a steep slope or cliff formed-directly by movement along a fault.			
299	Fault trace means the intersection of a fault plane with the ground surface.			
300	Fault zone means a corridor of variable width along one or more fault traces.			
301	Landslide means a general term for the downslope movement of a mass of soil, surficial deposits or			
302	bedrock.			
303	Liquefaction means a process by which certain water-saturated soils lose bearing strength because			
304	of ground shaking and increase of groundwater pore pressure.			
305 306	Natural-hazard-means avalanche, liquefaction, surface fault rupture, rock fall, debris flow, flood, tectonic subsidence and/or landslide.			
307	Natural hazard maps means the overlay maps, which delineate hazards, such as avalanche,			
308	liquefaction, surface fault rupture, rock fall and/or landslide areas.			
309	Rock fall means the gravity-induced drop of a newly detached segment of bedrock or perched rock			
310	of any size from a cliff or steep slope.			
311	Structure designed for human occupancy means any residential dwelling or any other structure used			
312	or intended for supporting or sheltering any use or occupancy which is expected to have occupancy rate			
313	of more than 2,000 person-hours per year.			
314	Sec. 104-27-4 Studies-Sec. 108-22-3 Study and reports required.			
315 316 317 318	(a) Requirement for <u>a study and report. Any applicant requesting Unless otherwise exempted in Section 108-22-5, any application for development on a parcel of land within a natural hazardshazard study area, as shown on the natural hazards maps, shall submitbe submitted to the planning commission sixdivision with two hard copies of and one electronic (pdf) copy of a</u>			

319 site-specific natural hazard studiesstudy and reports report, where required for such 320 development according to the following chart-:

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	Land Use (Type of Facility)	Liquefaction Potential High/Moderate	Landslide/Rock Fall/Debris Flow Study Area	Surface Fault Rupture Study Area	Tectonic Subsidence Study Area	<u>Flood Study</u> <u>Area</u>	<u>Other</u> <u>Hazardous</u> <u>Areas</u>
	Critical facilities	<u>Yes</u>	Yes	<u>Yes</u>	Recommended	Yes	As determined by the County Engineer
	Industrial, commercial, or multifamily (4 or more units)	Yes	Yes	Yes	No	Yes	<u>As determined</u> by the County Engineer
	<u>Residential</u> subdivisions	<u>No**</u>	Yes, unless otherwise provided by Section 108-22- 2(4)b.	Yes	No	Yes	As determined by the County Engineer
	<u>Residential,</u> single lots/multifamily (less than 4 units)	<u>No**</u>	Yes, unless otherwise provided by Section 108-22- 2(4)b.	<u>Yes</u>	No	Yes	As determined by the County Engineer
	**Alth	ough no study an	d report is required	l, disclosure is rea	quired as described	in Section 108-	22-4.
22 23 24 25	(1) The <u>E</u> engin prepa prepa	ach natural h eering geologi ared by an exp arer and shall a	azards hazard st. In the case o perienced avalat lso include the c	study and re of a snow ava nche expert. qualifications o	eport <u>and studi</u> alanche hazard, The <u>study and</u> f the preparer.	the study ar report shall	prepared by an nd report shall be be signed by the
26 27 28	(2) The Each natural hazard study and report shall be site-specific and identify, to the extent practicable, all known or suspected potential natural hazardshazard(s) originating on-site or off-site which present a reasonable likelihood of adversely affecting the particular property.						
29 30 31	(3) The <u>E</u> equal recon	ach natural ha s 200 feet or la nmended setba	zard study and arger), showing ick distances fro	the location and the hazard	include a detai and type of the and the recomm	led site map hazard with nended locati	(scale: one inch delineation of the on for structures.
32 33 34	(4) The Each natural hazard study and report shall address the potential <u>adverse</u> effects of the hazard on the proposed development and occupants thereof in terms of <del>risk and</del> the reasonable likelihood of potential damage.						

Comment [c8]: This section has been expanded and modified to accommodate all hazards listed in 108-22-2. It has been moved here from further down for clarity purposes.

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- (5) TheEach natural hazard study and report shall contain recommendations for avoidance or mitigation of the <u>identified adverse</u> effects of the hazard consistent with the purposes set forth in 336

337 section 104-27 Section 108-22-1 of this chapter. The evidence on which recommendations and
 338 conclusions are based shall be clearly stated in the report.

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(6) Trench logs (scale: one inch equals five feet or larger), trench photos, aerial photographs,
 references with citations, and other supporting information, as applicable, shall also be included
 in theeach natural hazard study and report.

<del>Land Use</del> <del>(Type of Facility)</del>	Liquefaction Potential High/Moderate	Landslide/Rock Fall/Debris Flow Special Study Area	Surface Fault Rupture Special Study Area
Critical facilities	Yes	Yes	Yes
Industrial or commercial ;gt;2 stories/;gt;5,000 sq. ft.	¥es	Yes	Yes
Multifamily (4 or more units) and all other industrial or commercial	¥es	<del>Yes</del>	
Residential subdivisions	No**	Yes	Yes
Residential, single lots/multifamily (less than 4 units/acre)	<del>No**</del>	Yes	Yes

\*\*Although no special study is required, disclosure is required as described in section 104-27-7.

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- (b) Review of the study and report. In order to fulfill the purposes of this chapter, the planning commission (for conditional uses, site plan review, design review and subdivisions)Land Use
   Authority shall review any proposed development which requires preparation of a natural hazardshazard study and report under this chapter to determine the possible risks to the safety of persons or property from a natural hazardshazard.
  - (1) Prior to consideration by the planning commissionLand Use Authority of any such development, the planning director shallCounty Engineer may submit the study and report to the Utah Geological and Mineral Survey, the U.S. Forest Service, and/or any other experts, if applicable, site specific plan, to outsourced qualified professionals for review and recommendation. Any cost for the review shall be paid by the applicant prior to any planning commissionLand Use Authority action.
  - (2) The County Engineer has discretion to reject the scope, techniques, methodology, conclusions, or specific types of information presented in the study and report if industry standards of care were not used. All conclusions of the study and report shall be supported by adequate data.
  - (3) The County Engineer shall prepare a final review and recommendation of an acceptable study and report, and, if applicable, site specific plans, for the Land Use Authority's consideration.

**Comment [c9]:** County Engineer may, but is not required to, outsource the review. The County Engineer will outsource in the event that there are unique issues with geology or a geology report.

**Comment [c10]:** This section is identified as potentially producing a decision of "technical aspects" for which an appeal may merit a special panel for review. See the new section 108-22-9(b) for more details.

**Comment [c11]:** This section is identified as potentially producing a decision of "technical aspects" for which an appeal may merit a special panel for review. See the new section 108-22-9(b) for more details.

359 360 361 362 363	(4) Whenever the planning commissionLand Use Authority determines that an area is subject to a natural hazardehazard which present an unreasonable risk to the safety of persons or property, including public streets, such area shall not be approved for development unless the applicant can demonstrate that such a risk can be reduced to a reasonable and acceptable level in a manner which has a minimum effect on the natural environment.
364	(35) The planning commissionLand Use Authority may set requirements or conditions necessary to
365	reduce the risks from <u>a</u> natural <u>hazardshazard</u> as a condition to the approval of any
366	development which requires preparation of a natural hazards <u>study and</u> report.
367 368 369 370 371 372 373 374 375 376	(c) Active fault consideration. No critical facility (excluding transportation lines or utilities which by their nature may cross active faults) or structures designed for human occupancy shall be built astride an active fault. If a fault is discovered in the excavation for such a structure, a special study and report, as described in subsection (a) of this section, shall be performed to determine if the fault is active, and if the fault is determined to be active, the procedures set forth in subsection (b) of this section, shall be followed. No structure designed for human occupancy shall be built on a fault scarp. Footing setbacks from a fault scarp shall meet the requirements of chapter 29 of the Uniform Building Code. The planning commission may increase footing setback requirements where information from a geotechnical report indicates slope conditions warrant a greater selback distance.
377	(c) Study and report confirmation. The project engineering geologist shall submit with the study a signed
378	and sealed confirmation letter that the study was conducted in accordance with industry standards of
379	care, and that it complies with this Land Use Code and all other applicable laws. Written verification
380	shall be provided from the issuer of professional errors and omissions liability insurance, in the
381	amount of one million dollars (\$1,000,000.00), which covers the engineering geologist, and which is
382	in effect on the date of preparation of all required studies and reports.
383 384 385 386 387	(d) Development design confirmation. Whenever possible, avoidance of development in an area with an identified natural hazard is strongly encouraged. However, pursuant to requirements of this chapter, development in an area with an identified natural hazard shall be permitted when it is designed to mitigate, and is reasonably safe from, the identified hazard. Final design of the development shall not be accepted by the County unless:
388	(1) The development's state licensed engineer, or if applicable, engineers, provide(s) the County
389	with a signed and sealed confirmation letter stating that, pursuant to the considerations,
390	findings, recommendations, and conclusions of the development's engineering geologist's study
391	and report, the development has been designed to mitigate, and is reasonably safe from, the
392	identified hazard.
393	(2) The development's engineering geologist submits a signed and sealed confirmation letter
394	stating that the final design of the development adequately provides for the considerations,
395	findings, recommendations, and conclusions of the study and report, and is reasonably safe
396	from the identified hazard.
397	(3) Written verification is provided from the issuer(s) of professional errors and omissions liability
398	insurance, in the amount of one million dollars (\$1,000,000.00), which covers the engineering
399	geologist and state licensed engineer(s), and which is in effect on the date of preparation of all
400	required reports and certifications.
401	Sec. <u>104-27-5108-22-4</u> Disclosure required.
402	(a) When a natural hazard report shows that a hazard exists which affects a particular parcel, a copy of
403	the report shall be kept for public inspection in the county planning commission office. The natural
404	hazard report denoting the type and severity of the hazard, the professional who prepared the report,
405	the fact that the report is available to the public at the county planning department, and any
406	restrictions on the use of the parcel required within the natural hazards report shall be recorded as a
407	deed covenant running with the land, in the office of the county recorder, in addition to the following:

(1) a copy of the report shall be kept for public inspection in the County Planning Division Office.

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Comment [c12]: This section does not belong here. It is incorporated into 108-22-2.

**Comment [c13]:** Subsection c and d are an expansion of a "certification" requirement in current code. It has been modified and expanded to provide for the following:

 It's been moved here to provide better visibility.
 It was previously tucked into §104-27-2, which is an inconsistent place for its meaning and application.

It has been modified to avoid the word "certify." In the geology and engineering world this word has a different meaning than the code anticipates.

3. It has been modified to put the general public and the private market on notice that the private market needs to be willing to accept full accountability for their work. This is an attempt to help shift "good development practices" from needing complete governmental control, and place it on the private market folks who are actually experts in their field.

4. It is an effort to keep the project geologist in the loop during development design – and to keep designs complying with the geologists recommendations. A reoccurring flaw in relying on the private market to provide optimal geologic hazards safety without significant governmental oversight is that there are not the appropriate checks and balances. Often times development designers do not completely consider the geologists recommendations and infrastructure failures can result. In lieu of significant governmental control over geology review, this section requires that the government check that the project geologist has checked the work and is satisfied.

409 410	(2) A covenant that runs with the land shall be recorded, and, if applicable, a note on the subdivision plat shall be required, which provide:
411 412	<ul> <li>a. Notice that the parcel is located within a natural hazards specialhazard study area-as shown on the natural hazards map.;</li> </ul>
413 414 415	(2)b. Notice of the existence and availability of the that a natural hazards hazard study and report is available for public inspection in the county planning commission office. County Planning Division Office:
416 417	(3)c. Notice that a hazard has been identified on the parcel and the type and severity of the hazard;
418	d. The professional who prepared the report, with his or her contact information;
419 420	e. Any restrictions on the use of the parcel required within the natural hazard report, or by the Land Use Authority; and
421 422 423	<u>f.</u> An agreement by the owner of the parcel and any successor in interest to comply with anythe conditions set by the planning commissionLand Use Authority to minimize adverse effects of the natural hazard.
424 425 426 427 428	(4b) When a natural hazard report is not required, but where the parcel is located within a mapped hazardous area, as shown on one of the natural hazards overlay mapshazard study area, notice that the parcel is located within such an area shall be recorded as a deed covenant running with the land in the county recorder's officeand noted on the subdivision plat (if applicable), and shall be written in a form satisfactory to the county engineer County Engineer and attorneyCounty Attorney.
429 430 431 432 433 434 435 436 437	(5c) The natural hazardshazard ordinance codified in this chapter and natural hazards-mapshazard map represent only those <u>potentially</u> hazardous areas known to the <u>countyCounty</u> , and shall not be construed to include all possible potential hazard areas. The natural hazards listed in this chapter and associated maps may be amended as new information becomes available. The provisions of this chapter do not in any way assure or imply that areas outside its boundaries will be free from the possible adverse effects of <u>a</u> natural hazardshazard. This chapter shall not create liability on the part of the <u>countyCounty</u> , any officer or employee thereof for any damages from <u>a</u> natural hazardshazard that result from reliance on this chapter or any administrative requirement or decision lawfully made thereunder.
438	Sec. 104-27-6108-22-5 Exemptions from filling-natural hazard study and report.
439 440 441	Proposed developmentA proposed structure that is not occupied by humansa structure designed for human occupancy shall not be required to provide a natural hazard report, except critical facilities which a report shall be provided for a critical facility if required to provide a report. by Section 108-22-3.
442	Sec. 104-27-7108-22-6 Costs to be the responsibility of the developer/applicant.
443 444 445 446 447 448	Any of the above described technical reports and/or studies shall be performed by the required qualified professional professionals on behalf of the county through a third-party contract where all fees, costs and expenses are applicant. The cost of outsourced qualified professionals used by the County to aid in the review required in Section 108-22-3 is the responsibility of the applicant. Any other costs incurred in providing technical reports or testimony by <u>qualified professionals or</u> expert witnesses shall be solely the responsibility of the applicant and not the <u>countyCounty</u> .
449	Sec. 104-27-8108-22-7 Change of use.

No change in use which results in the conversion of a building or structure from one not
 useddesigned for human occupancy to one that is so useddesigned for human occupancy shall not be
 permitted unless the building or structure complies with the provisions of this chapter.

453 Sec. 104-27-9. Variances.

**Comment [c14]:** One objective of this amendment is to make it clear that expert reviews will not always be required by the County Engineer; but when they are the applicant is responsible for the cost.

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454	(a) Ability to grant. The county board of adjustment, when deciding appeals for variances of distance or
455	area within the Natural Hazards Overlay Zone shall follow both the standards of title 102, chapter 3
456	of the Weber County Land Use Code and the standards stated below.
457	(b) Items to consider. In deciding whether to grant a variance and what conditions to attach to its
458	approval, the board of adjustment shall consider.
459	(1) The likelihood during a significant seismic or other geologic event that materials may be moved
460	onto adjacent land areas causing injury to persons or property;
461 462	(2) The degree of susceptibility to damage by seismic or other geologic activity for the building design or use proposed;
463	(3) The importance of the services of the proposed facility to the community and the need for the
464	facility to be functional following a significant event of geologic activity;
465	(4) The necessity of the facility to be in the proposed location or proposed design;
466	(5) Considering alternate locations and designs available;
467 468	(6) The ability of the community to provide emergency services to the facility in the event of a catastrophe;
469	(7) The degree of benefit received from the variance relative to the hazards posed to the facility's
470	neighbors, visitors, and owners.
471	(c) Presumption relative to approval. Generally, the standards of this chapter shall not be varied unless
472	an equally safe method of use and construction can be approved.
473	(1) The amount of variance approved shall be only the minimum amount required to provide relief.
474	(2) A variance shall be granted only if it will not result in a threat to public safety, cause
475	extraordinary public expense, or create a nuisance.
476	(3) A variance shall be granted only if it will not result in a threat to public safety, cause
477	extraordinary public expense, or create a nuisance.
478	(4) In a continuum beginning with hay barns and agricultural structures and going to high rise
479	apartment buildings and auditoriums, the difficulty in obtaining a variance shall be greater for
480	structures with a high percentage of time when the structure is utilized by humans or is
481	occupied by a large number of people.
482	Sec. 104-27-10 Disputes; 108-22-8 Conflict between boundaries of study area or identified hazard.
483	or mapped hazards.
484	The boundary lines of the special study areas shown on the Natural Hazards Overlay Maps shall be
485	determined by use of the scale appearing on the map.
486	Where there is a conflict between the <u>boundary lines illustrated on the map boundaries of an</u>
487	<u>identified natural hazard study area</u> and actual field conditions, or where detailed investigations show that
488	the <u>mapped hazards areidentified hazard is</u> not present within a particular area, the <u>disputeconflict</u> shall
489	be settled as follows:
490	(1) The person disputing the <u>natural hazard study area boundary or the mapped hazards present</u>
491	within a particular area <u>boundary</u> shall submit technical and geologic evidence to support such
492	claim to the <u>planning commissionCounty Engineer</u> in the form of a site-specific natural
493	<u>hazardshazard</u> report.
494	(2) The <u>planning commissionCounty Engineer</u> may request the <u>Utah Geological Survey</u> , the <u>U.S.</u>
495	Forest Service, and/or other expertsoutsourced qualified professionals to review the evidence
496	and make a recommendation prior to making a <u>final written</u> decision concerning the dispute.

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497 498	(3)—The cost of the <u>outsourced qualified professional's</u> review shall be paid by the person disputing the <u>mapboundary</u> .	
499 500 501 502	(43) The planning commissionCounty Engineer may allow deviations frommodifications to the mapped boundary-line only if the evidence clearly and conclusively establishes that the natural hazard study area boundary location is incorrect, or that the mapped hazards areidentified hazard is not present within a particular area.	
503	<del>(5) Any.</del>	
504	Sec. 108-22-9 Appeals.	Comment [c15]: State code requires the county
505 506 507	(a) Except as allowed in subsection (b) of this Section, an appeal of any written decision of the planning commission may application of this chapter shall be appealed to in accordance with Title 102, Chapter 3 – Board of Adjustment, of this Land Use Code.	to allow appeals to be run this way. Our natural hazards code does not currently adequately provide for this.
508 509 510 511	(b) When a written decision provided under this chapter contains technical aspects, an applicant may request the board of county commissioners by filing an appeal within 15 days of County to assemble a panel of qualified professionals to serve as the planning commission's decision, appeal authority for the sole purpose of determining those technical aspects.	
512 513	(1) The technical aspects of the administration and interpretation of this chapter are decisions related to:	
514 515	<ul> <li>a. the acceptance or rejection of scope, techniques, methodology, conclusions or specific types of information presented in a study or report;</li> </ul>	
516 517	<ul> <li>the review and recommendation of an acceptable study or report for the Land Use Authority's consideration;</li> </ul>	
518 519	<ul> <li>the interpretation of any technical provisions of a study or report that is required by this chapter; or</li> </ul>	
520	d. the modification of a natural hazard study area boundary.	
521 522	(2) Unless otherwise agreed by the applicant and County, if an applicant makes a request under this subsection, the County shall assemble the panel consisting of:	
523	a. one qualified professional designated by the County;	
524	b. one qualified professional designated by the applicant; and	
525 526	c. one qualified professional chosen jointly by the County's designated qualified professional and the applicant's designated qualified professional.	
527 528	(3) A member of the panel may not be associated with the application that is the subject of the appeal.	
529	(4) The applicant shall pay for one half the cost of the panel in addition to the County's appeal fee.	
530 531	(5) The panel shall be governed by the same appeal provisions of the Board of Adjustment provided in Title 102, Chapter 3 - Board of Adjustment, of this Land Use Code.	
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## Weber County Land Use Code Revision Process Workflow

This flowchart is intended to illustrate the intended course of the revision process. It is not an absolute plan, and deviations may occur as more information is gathered, but it will provide the Planning Commission with an idea where we are in the process at any given time. Staff will refer to this structure regularly.

