

CITY OF MUSCATINE

APPEAL UNDER THE ZONING ORDINANCE

NOTE: This appeal must be typewritten and filed within thirty (30) days of the decision or refusal of the Zoning Administrator, from which this appeal is taken.

Board of Adjustment Case No.: 928

Filed: November 13, 2014

BOARD OF ADJUSTMENT  
CITY OF MUSCATINE, IOWA

Ladies and Gentlemen:

On November 14, 2014, the undersigned applied for (a building/an occupancy) permit to raise the antenna height on a low power FM radio station from 35 feet to 49.2126 feet (15 meters).

Located on Lot \_\_\_\_\_ Block \_\_\_\_\_ Addition \_\_\_\_\_  
Address 2901 Mulberry Avenue in the R-1 Zoning District.

This permit was refused because (this is to be completed by the Zoning Administrator):

The proposed antenna height exceeds the 35 foot maximum height limit allowed in the R-1 Zoning District per City Code 10-6-3(A).

The above decision of the Zoning Administrator is hereby appealed on the grounds that

The allowed variance would be good for Muscatine and a non-issue to neighbors. See the attached letter and documents.

Very truly yours,

\_\_\_\_\_  
APPELLANT SIGNATURE

Randy Ludke

\_\_\_\_\_  
PRINT NAME

2904 Mulberry Avenue, Muscatine, IA 52761

\_\_\_\_\_  
ADDRESS

563-263-3362

\_\_\_\_\_  
PHONE

Fee Paid: \$150.00 11/13/2014

Receipt No.: 12192

Date of Hearing: 12/02/2014

Notice Sent: 11/26/2014

Approved by Andrew Fangman: Yes

***Filing fee is \$150.00.***

November 14, 2014

City of Muscatine  
Board of Adjustment  
Muscatine, IA 52761

Re: Request for a variance on the maximum allowed antenna height for a low power FM station.

On January 31, 2014, the FCC granted the Muscatine Seventh-day Adventist Church a "Construction Permit" to build and operate a low power FM radio station (KMAC-LP, 92.5 MHz) at 2904 Mulberry Avenue in Muscatine, where the church is located – find enclosed item number 1. We started transmitting October 24<sup>th</sup>, 2014. KMAC-LP broadcasts Christian programming -- music, sermons, Bible seminars, vegetarian cooking, health messages and maybe some local live events. It is completely a public service and we will not be soliciting locally for any advertising. I've attached an FCC created "Google Map", enclosed item number 2, showing the estimated coverage area if the antenna is at the FCC allowed maximum height of 15 meters, 49.2126 feet; and the station transmits at the maximum allowed signal strength.

Just a little bit about Seventh-day Adventists. Conducting a Google search on the world's "Blue Zones" will get you a Wikipedia listing for Loma Linda in California, enclosed item number 3. It is the only "Blue Zone" in North America – a "Blue Zone" is where people live way longer and healthier than the norm. It is because of the preponderance of Seventh-day Adventists living in the area who are vegetarians, live a healthy lifestyle, and have a spiritual peace. I believe this radio station will be a help in Muscatine's goal of becoming a "Blue Zone".

Our FCC license allows us an antenna height of up to 15 meters, 49.2126 feet. The FCC calculates antenna height and signal strength to make sure stations they've approved for construction/operation don't interfere with others. The City of Muscatine allows us an antenna height of up to 35 feet. We are asking for a small variance to allow us to raise the current antenna (not the dish) up an additional 14.2126 feet to the FCC approved height of 49.2126 feet.

The antenna is on the back of the church at 2904 Mulberry, pretty much invisible in all directions – I've included some pictures, items 4 through 7. The antenna is 340 feet away from Mulberry Avenue on the North, 50 feet away from the property line on the West, 230 feet from the property line on the East and 645 feet from the property line on the South. Three sides are almost totally hidden from any neighbors East, West and South by stands of trees that extend up over 50 feet; so the antenna would not be very visible. I also think people would be hard pressed to notice anything from the Mulberry Avenue side as well – the antenna and mast are not very big and it is a long way away.

The raising of the antenna (not the dish) would be done with a smaller insert to our current mast – no guide wires or any additional support (see the picture of our current antenna, item number 8). The antenna will look pretty much as it does now, just a little higher. It will give the radio station additional range and clarity, range and clarity that the FCC has already approved.

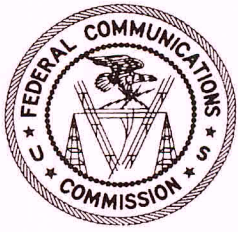
In conclusion, the FCC has already approved an antenna height of up to 15 meters, 49.2126 feet. They granted the antenna height and signal strength on the basis of not bothering others electronically. It would be the FCC's fight if anyone would complain about the station on an electronic basis. Also, the antenna at 15 meters, 49.2126 feet, would be virtually invisible to all neighbors.

Thank you for your consideration of granting us this small variance. I believe the additional 14.2126 feet of antenna height will be a benefit to Muscatine and the surrounding area.

Sincerely,



Randy Ludke  
Muscatine Seventh-day Adventist Church  
2904 Mulberry Avenue  
Muscatine, IA 52761



Item 1  
United States of America

**FEDERAL COMMUNICATIONS COMMISSION  
LOW POWER FM BROADCAST STATION  
CONSTRUCTION PERMIT**

Authorizing Official:

Official Mailing Address:

MUSCATINE SEVENTH-DAY ADVENTIST CHURCH  
2904 MULBERRY ST  
MUSCATINE IA 52761

James D. Bradshaw  
Deputy Chief  
Audio Division  
Media Bureau

Facility ID: 195130

Grant Date: January 31, 2014

Call Sign: KMAC-LP

This permit expires 3:00 a.m.  
local time, 18 months after the  
grant date specified above.

Permit File Number: BNPL-20131105ALT

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be made only in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules. See Section 73.875.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee: MUSCATINE SEVENTH-DAY ADVENTIST CHURCH

Station Location: IA-MUSCATINE

Frequency (MHz): 92.5

Channel: 223

Class: LP100

Hours of Operation: Unlimited



Transmitter: Type Certified. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Transmitter output power: As required to operate within authorized range of effective radiated power.

Antenna type: Non-Directional

Antenna Coordinates: North Latitude: 41 deg 26 min 29 sec  
West Longitude: 91 deg 04 min 09 sec

Maximum Effective radiated power in the Horizontal Plane (watts): 86

Minimum Effective radiated power in the Horizontal Plane (watts): 44

Height of radiation center above ground (Meters): 15

Height of radiation center above mean sea level (Meters): 228

Height of radiation center above average terrain (Meters): 32

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 15 Meters

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

None Required

Special operating conditions or restrictions:

- 1 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

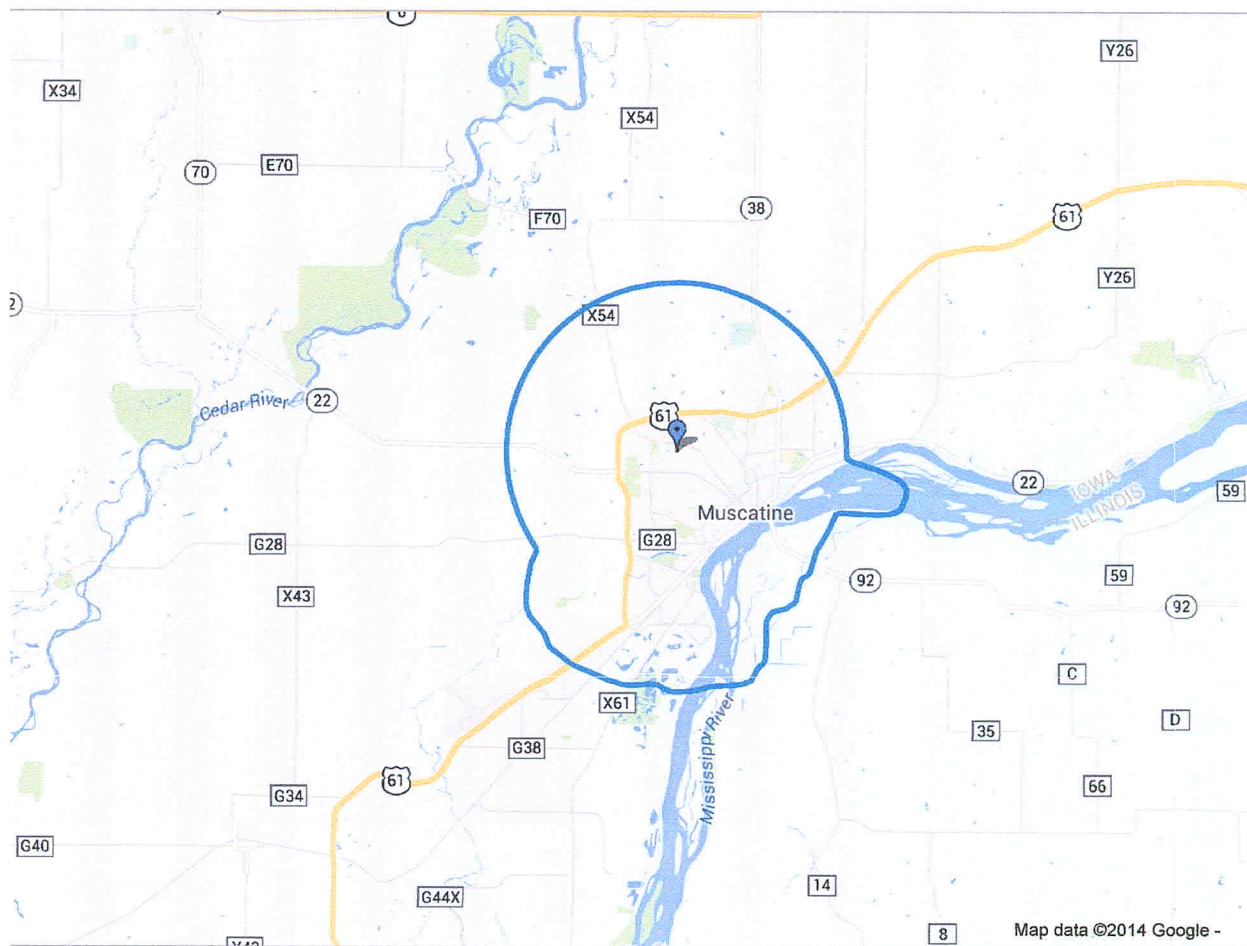
\*\*\* END OF AUTHORIZATION \*\*\*

## Item 2

Google

This feature is not supported in the new Google Maps. To see all the details that are visible on the screen, use the "Print" link next to the map.

Google Maps. [Learn more](#) [Dismiss](#)



Displaying content from [transition.fcc.gov](http://transition.fcc.gov)

The content displayed below and overlaid onto this map is provided by a third party, and Google is not responsible for it. Information you enter below may become available to the third party.

60 dBu Service Contour for KMAC-LP, 92.5 MHz, Muscatine, IA

- ☒  KMAC-LP, Muscatine, IA  
92.5 MHz -- FCC File No. BNPL-20131105ALT
- ☒ 60 dBu Service contour
- ☒ 60 dBu Service contour (alternate color)

# Item 3

## Blue Zone

From Wikipedia, the free encyclopedia

**Blue Zone** is a concept used to identify a demographic and/or geographic area of the world where people live measurably longer lives. The concept grew out of demographic work done by Gianni Pes and Michel Poulain,<sup>[1]</sup> who identified Sardinia's Nuoro province as the region with the highest concentration of male centenarians. As the two men zeroed in on the cluster of villages with the highest longevity, they drew concentric blue circles on the map and began referring to the area inside the circle as the Blue Zone. Dan Buettner identifies longevity hotspots in Okinawa (Japan); Sardinia (Italy); Nicoya (Costa Rica); Icaria (Greece); and among **the Seventh-day Adventists in Loma Linda, California**, and offers an explanation, based on empirical data and first hand observations, as to why these populations live healthier and longer lives.

### Contents

- 1 Zones
- 2 Characteristics
- 3 See also
- 4 Bibliography
- 5 References
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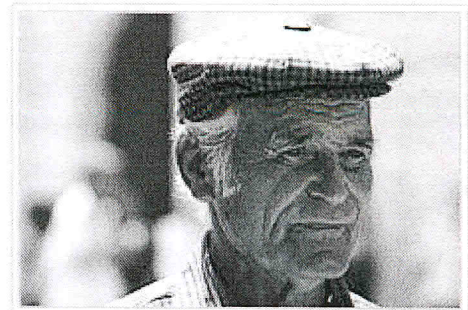
## Zones

The five regions identified and discussed by Buettner in the book Blue Zones:<sup>[2]</sup>

- Sardinia, Italy (specifically Nuoro province and Ogliastra): one team of demographers found a hot spot of longevity in mountain villages where men reach the age of 100 years at an amazing rate.<sup>[2]</sup>
- The islands of Okinawa, Japan: another team examined a group that is among the longest-lived on Earth<sup>[2]</sup>



- Loma Linda, California: researchers studied a group of Seventh-day Adventists who rank among North America's longevity all-stars<sup>[2][3]</sup>
- Nicoya Peninsula, Costa Rica: the peninsula was the subject of research on a Quest Network expedition which began on January 29, 2007.<sup>[2][4]</sup>  
[5]
- Icaria, Greece: an April 2009 study on the island of Ikaria uncovered the location with the highest percentage of 90 year-olds on the planet - nearly 1 out of 3 people make it to their 90s. Furthermore, Ikarians "have about 20 percent lower rates of cancer, 50 percent lower rates of heart disease and almost no dementia".<sup>[2][6]</sup>



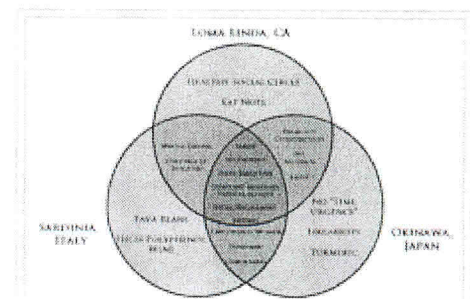
An old man in Sardinia

Residents of the first three places produce a high rate of centenarians, suffer a fraction of the diseases that commonly kill people in other parts of the developed world, and enjoy more healthy years of life.<sup>[7]</sup>

## Characteristics

The people inhabiting Blue Zones share common lifestyle characteristics that contribute to their longevity. The Venn diagram at the right highlights the following six shared characteristics among the people of Okinawa, Sardinia, and Loma Linda Blue Zones:<sup>[8]</sup>

- Family – put ahead of other concerns
- Less smoking
- Semi-vegetarianism – except for the Sardinian diet, the majority of food consumed is derived from plants
- Constant moderate physical activity – an inseparable part of life
- Social engagement – people of all ages are socially active and integrated into their communities
- Legumes – commonly consumed



Venn Diagram of longevity clues from Okinawa, Sardinia, and Loma Linda

## See also

- AARP/Blue Zones Vitality Project
- Beach Cities Health District
- Longevity

## Bibliography

- Buettner, Dan (2012). *The Blue Zones, Second Edition: 9 Lessons for Living Longer From the People Who've Lived the Longest*. Washington, D.C.: National Geographic. ISBN 978-1426209482. OCLC 777659970 (<https://www.worldcat.org/oclc/777659970>).
- Buettner, Dan (2010). *Thrive : finding happiness the Blue Zones way*. Washington, D.C.: National Geographic. ISBN 978-1426205156. OCLC 651074951 (<https://www.worldcat.org/oclc/651074951>).

## References

1. ^ Poulain M.; Pes G.M.; Grasland C.; Carru C.; Ferucci L.; Baggio G.; Franceschi C.; Deiana L. (2004). "Identification of a Geographic Area Characterized by Extreme Longevity in the Sardinia Island: the AKEA study". *Experimental Gerontology* **39** (9): 1423–1429. doi:10.1016/j.exger.2004.06.016 (<http://dx.doi.org/10.1016%2Fj.exger.2004.06.016>). PMID 15489066 (<https://www.ncbi.nlm.nih.gov/pubmed/15489066>).
2. ^ <sup>a</sup> <sup>b</sup> <sup>c</sup> <sup>d</sup> <sup>e</sup> <sup>f</sup> Buettner, Dan (21 April 2009) [2008]. "Contents" (<http://books.google.com/books?id=7S79PQAACAAJ>). *The Blue Zones: Lessons for Living Longer From the People Who've Lived the Longest* (First Paperback ed.). Washington, D.C.: National Geographic. p. vii. ISBN 978-1-4262-0400-5. OCLC 246886564 (<https://www.worldcat.org/oclc/246886564>). Retrieved 15 September 2009.
3. ^ Anderson Cooper, Gary Tuchman (November 16, 2005). "CNN Transcripts on Living Longer" (<http://transcripts.cnn.com/TRANSCRIPTS/051116/acd.01.html>). Retrieved 2006-08-25. See CNN excerpt (<http://www.youtube.com/watch?v=dluh9YqSKXY>) on YouTube.
4. ^ "Nicoya, Costa Rica" (<http://www.bluezones.com/programs/expeditions/nicoya-costarica/>). BlueZones.com. Retrieved 2011-03-04.



5. ^ Dan Buettner (2007-02-02). "Report from the 'Blue Zone': Why Do People Live Long in Costa Rica?" (<http://abcnews.go.com/Technology/LivingLonger/story?id=2843049&page=1>). *ABC News*. Retrieved 2011-03-04.
6. ^ *The Island Where People Live Longer* (<http://www.npr.org/templates/story/story.php?storyId=103744881>), NPR: Weekend Edition Saturday, May 2, 2009.
7. ^ Buettner, Dan: "The Secrets of Long Life.", page 9. National Geographic, November 2005.
8. ^ Power 9™ » Blue Zones – Live Longer, Better (<http://www.bluezones.com/live-longer/power-9>): "Blue Zones – Live Longer, Better", Quest Network, 2006.

## External links

- Quest Network: Blue Zones (<http://www.bluezones.com>)

Retrieved from "[http://en.wikipedia.org/w/index.php?title=Blue\\_Zone&oldid=626712560](http://en.wikipedia.org/w/index.php?title=Blue_Zone&oldid=626712560)"

Categories: Blue Zones | Determinants of health | Life extension | Senescence

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## Item 4





## Item 5





Item 6





## Item 7





## Item 8

